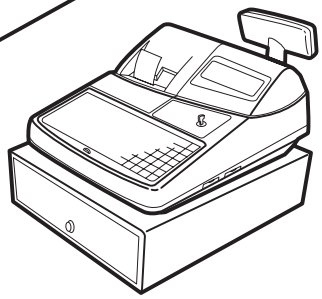
SHARP PROGRAMMING MANUAL

CODE : 00ZERA410VPME

ER-A410



ER-A420

ELECTRONIC CASH REGISTER

MODEL ER-A410 ER-A420

(For "V" version)
SRV KEY:LKGIM7113RCZZ
PRINTER:PR-45M II

CONTENTS

CHAPTER 1. SERVICE (SRV) MODE . . . . . 1 - 1

CHAPTER 2. PROGRAM (PGM2/PGM1) MODE. . . . . 2 - 1

CHAPTER 3. OP X/Z, X1/Z1,X2/Z2 MODE . . . . . 3 - 1

CHAPTER 4. CHANGING EURO FUNCTION (X2/Z2 MODE JOB) . . 4 - 1

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

CHAPTER 1. SERVICE (SRV) MODE

The SRV key is used for operating in the SRV mode.

MASTER RESET clears the entire memory and resumes initial values.

PROGRAM RESET resumes the initial program without clearing memory.

There are 2 kind of MASTER RESET.

MASTER RESET 1: Normal MASTER RESET
It clears the entire memory and resumes initial values.

MASTER RESET 2: It enables the layout of fixed keys in addition to MASTER RESET 1.

Fixed keys: [0] [1] [2] [3] [4] [5] [6] [7] [8] [9] [00] [000] [.] [CL] [x] [ST] [TL]

1. PROCEDURE

■MASTER RESET 1

"Procedure A" or "Procedure B"

Procedure A: 1) Set the mode switch to the (SRV') position.
2) Plug in the AC cord to the wall outlet.
3) While holding down the JOURNAL FEED key, turn the mode switch to (SRV) position from (SRV') position.

Procedure B: 1) Unplug the AC cord from the wall outlet.
2) Set the mode switch to the (SRV) position.
3) While holding down the JOURNAL FEED key, plug in the AC cord to the wall outlet.

Note: Procedure B cannot reset the hardware.
It must be operated "Procedure A" to reset the hardware.

■MASTER RESET 2

"Procedure A" or "Procedure B"

Procedure A: 1) Set the mode switch to the (SRV') position.
2) Plug in the AC cord to the wall outlet.
3) While holding down the JOURNAL FEED key & the RECEIPT FEED key, turn the mode switch to (SRV) position from (SRV') position.
4) Program [0] [1] [2] [3] [4] [5] [6] [7] [8] [9] [00] [000] [.] [CL] [x] [ST] [TL] keys by depressing in this order.

Note: If [000] key is not required, press the same key in the next step, and [000] key will be inhibited.

Procedure B: 1) Unplug the AC cord from the wall outlet.
2) Set the mode switch to the (SRV) position.
3) While holding down the JOURNAL FEED key & the RECEIPT FEED key, plug in the AC cord to the wall outlet.
4) Same as "Procedure A"

Note: Procedure B cannot reset the hardware.
It must be operated "Procedure A" to reset the hardware.

■PROGRAM RESET

"Procedure A", "Procedure B" or "Procedure C"

Prodecure A: 1) Set the mode switch to the (SRV') position.
2) Plug in the AC cord to the wall outlet.
3) Whithout pressing the JOURNAL FEED key, turn the mode switch to (SRV) position from (SRV') position.

Procedure B: 1) Unplug the AC cord from the wall outlet.
2) Set the mode switch to the (SRV) position.
3) Without pressing the JOURNAL FEED key, plug in the AC cord from the wall outlet.

Procedure C: 1) Unplug the AC cord from the wall outlet.
2) Set the mode switch to the PGM2 position.
3) While holding down the JOURNAL FEED key & the RECEIPT FEED key, plug in the AC cord to the wall outlet.

∗"Procedure C" can be done when SRV#916_B_+4: PROGRAM RESET in PGM2 = ENABLE.

Note: Procedure B and C cannot reset the hardware.
It must be operated "Procedure A" to reset the hardware.

2. KEY SETUP PROCEDURE

■MASTER RESET 1

1) During memory clearing and initializing, "∗∗∗MRS.∗∗∗" is displayed on upper line.
2) When MASTER RESET is finished, the buzzer beeps 3 times.
No message is printed.

■MASTER RESET 2

1) The key text that should be programmed is displayed.

ex) 001 0 KEY → 002 1 KEY → ...

2) During memory clearing and initializing, "∗∗∗MRS.∗∗∗" is displayed on upper line.
3) When MASTER RESET is finished, the buzzer beeps 3 times.
No message is printed.

■SERVICE RESET

1) When SERVICE RESET is finished, "PROGRAM RESET ∗∗∗" is printed. Buzzer does not beep.

3. READING OF THE SRV MODE PROGRAM

List of program reports

JOB#	Report name
900	SRV-mode program full item report (not incl. keyboard layout)
950	Keyboard layout report (except Dept. key & PLU key)
951	Keyboard layout report (only Dept. key & PLU key)
990	SSR report

Program reports are printed on RECEIPT & JOURNAL.

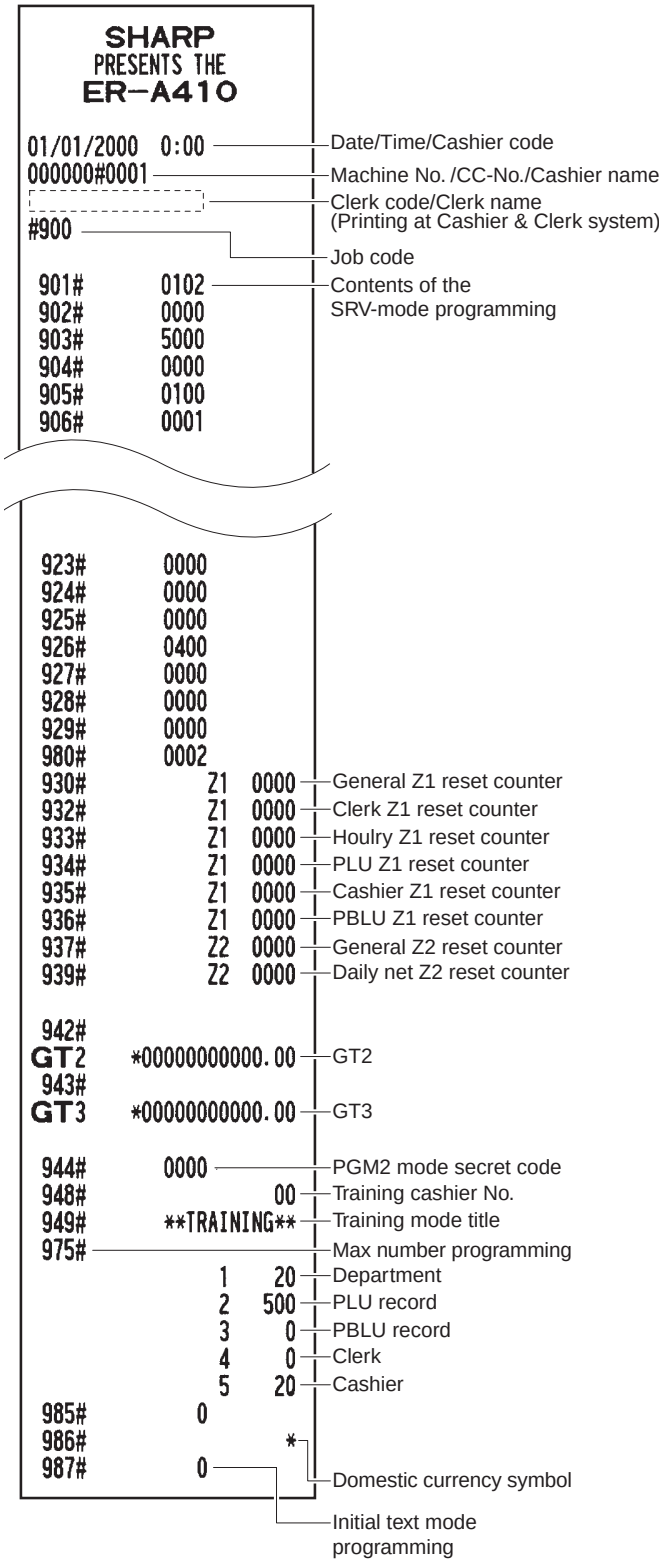
∗This printing sample is used from the ER-A410.

[JOB# 900]

Reading the contents of the SRV mode programming

Key operation.

900 → ⊗ → TL



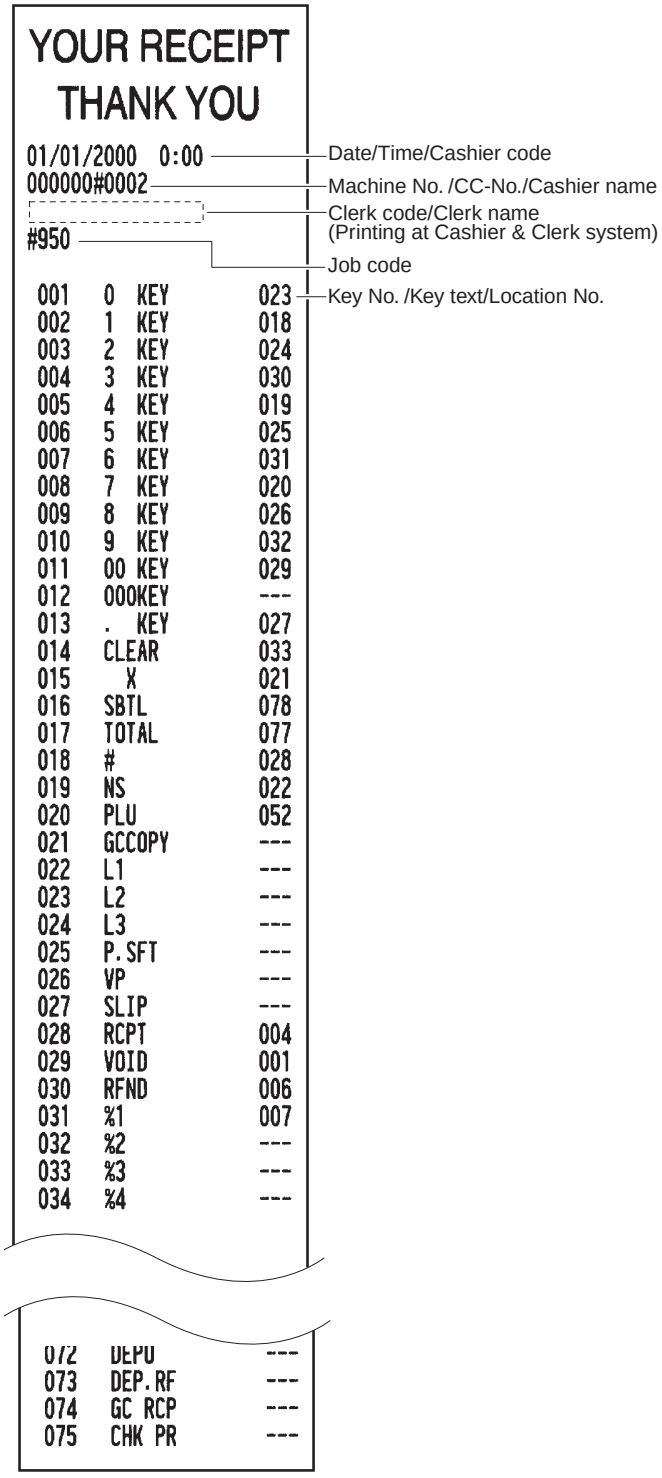
The contents of the programming are printed only on the journal in individual formats shown above.

[JOB# 950]

Reading the contents of the SRV mode programming for FREE KEY LAYOUT setting. (Function Key)

Key operation

950 → ⊗ → TL

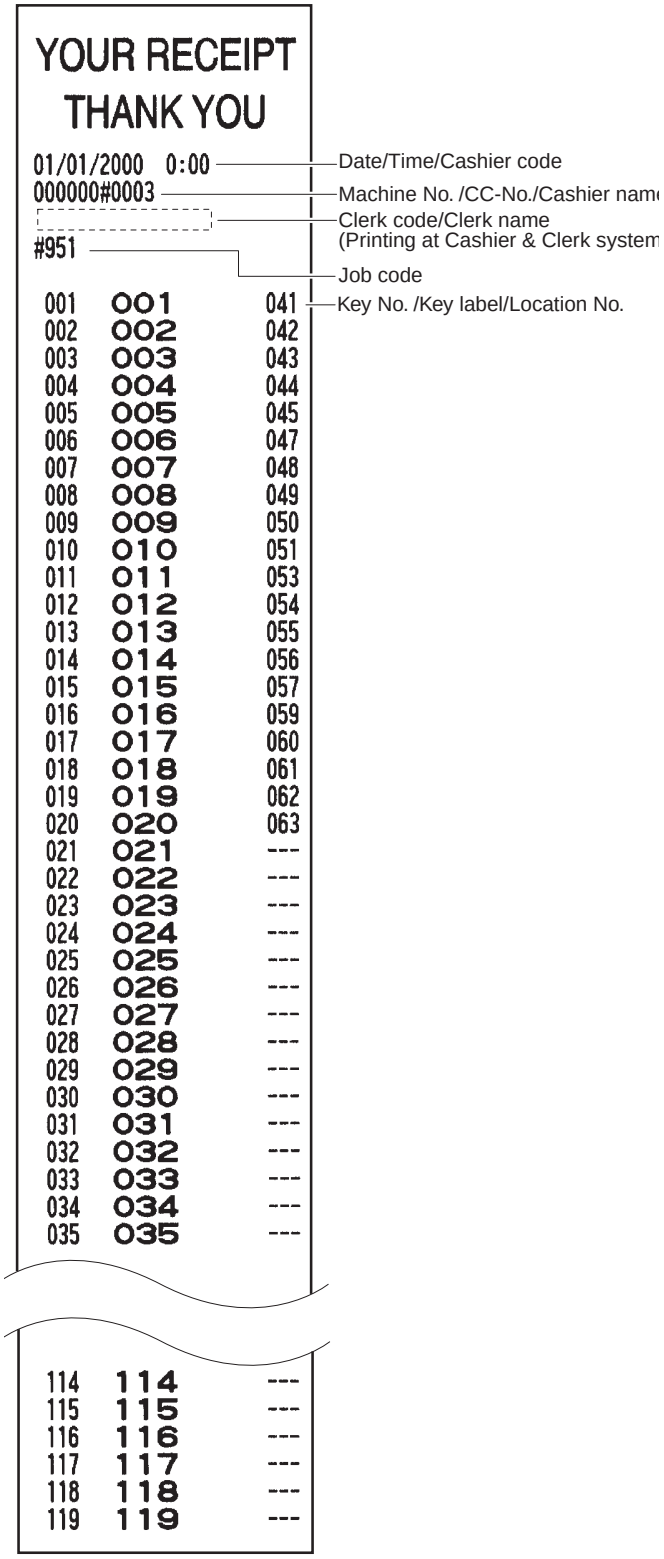


[JOB# 951]

Reading the contents of the SRV mode programming for FREE KEY LAYOUT setting. (Dept. & PLU key)

Key operation

951 → ⊗ → TL

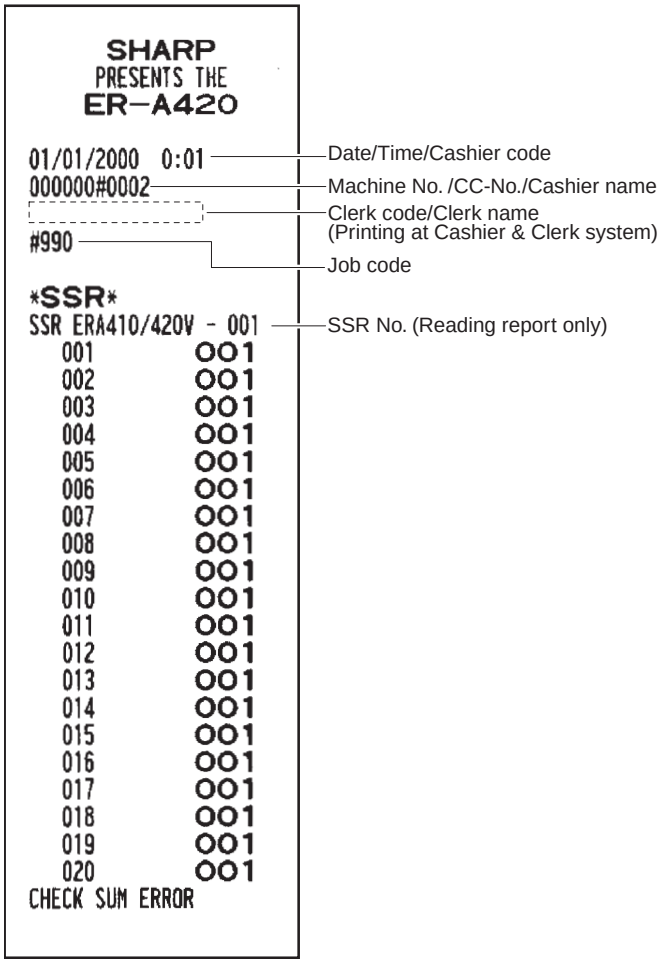


[JOB#990]

Reading the contents of the SRV mode programming for SSR setting.

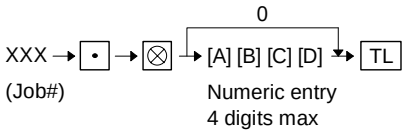
Key operation

990 → ⊗ → TL



4. SERVICE MODE PROGRAMMING

The following are the key operation required for programming.



Details of [A] [B] [C] [D] will be discussed at each item description.

★ mark is MRS setting.

[JOB#901] ER-A410: MRS = 0102
ER-A420: MRS = 0102

#901-A: EFT EASY CARD

1. EFT EASY CARD	901-A	
NO	0	★
YES	2	

#901-B: Tax system

1. TAX system	901-B	
Auto TAX 1~4	0	
Auto VAT 1~4	1	★
Manual VAT 1~4	2	
Manual VAT 1	3	
Manual TAX 1~4	4	
Auto VAT 1 and Auto TAX 2~4	5	

#901-C: 1. Rounding system

1. Rounding system	901-C	
Normal	0	★
SWEDEN	1	
DENMARK	4	

#901-D: 1. TAB setting

1. TAB setting	901-D	
0.	0	
0.0	1	
0.00	2	★
0.000	3	

[JOB#902] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#902-A, B, C: Not used (Fixed at "000")

#902-D: 1. EFT TERMINAL

1. EFT TERMINAL	902-D	
NO	0	★
YES	4	

[JOB#903] ER-A410: MRS = 5000
ER-A420: MRS = 5000

#903-A: 1. ECR data copy baud rate

1. Baud rate (bps)	903-A	
9600	4	
19200	5	★

#903-B, C, D: Not used (Fixed at "000")

[JOB#904] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#904-A: 1. Printing of date

1. Printing of date	904-A	
Yes	0	★
No	4	

#904-B: 1. Printing of consecutive No.

1. Printing of consecutive No.	904-B	
Yes	0	★
No	4	

#904-C, D: Not used (Fixed at "00")

[JOB#905] ER-A410: MRS = 0100
ER-A420: MRS = 0100

#905-A: Not used (Fixed at "0")

#905-B: 1. Tax printing when taxable subtotal is zero.
2. Tax printing when tax is zero.

1. Taxable subtotal is zero	2. Tax is zero	905-B	
Skip	Print	0	
	Skip	1	★
Print	Print	4	
	Skip	5	

#905-C: 1. Printing of rounding amount in receipt. (For Australia)
2. Printing format for split pricing entry. (For Australia)

1. Printing of rounding amount in receipt	2. Printing format for split pricing entry	905-C	
No	Normal format	0	★
	Australia format	1	
Yes	Normal format	2	
	Australia format	3	

#905-D: Not used (Fixed at "0")

[JOB#906] ER-A410: MRS = 0001
ER-A420: MRS = 0001

#906-A: 1. Printing of PLU codes

2. Entry which makes the PLU stock counter negative

1. Printing of PLU codes	2. Entry which makes the PLU stock counter negative	906-A	
NO	Allowed unconditionally	0	★
	Operation allowed despite error massage	1	
	inhibited	2	
YES	Allowed unconditionally	4	
	Operation allowed despite error massage	5	
	inhibited	6	

#906-B: 1. Bottle return function

2. Hash setting

1. Bottle return function	2. Hash setting	906-B	
Disable	Disable	0	★
	Enable	2	
Enable	Disable	4	
	Enable	6	

#906-C: 1. Split pricing counting

2. Multiplication entry

1. Split pricing counting	2. Multiplication entry	906-C	
Quantity	Multiplication	0	★
	Successive multiplication	1	
	Split pricing	2	
Package	Multiplication	4	
	Successive multiplication	5	
	Split pricing	6	

#906-D: 1. Presetting of consecutive No.

2. Fractional quantity (3 digit decimal places)

1. Presetting of consecutive No.	2. Fractional quantity	906-D	
Yes	No	0	
	Yes	1	★
No	No	2	
	Yes	3	

[JOB#907] ER-A410: MRS = 0014
ER-A420: MRS = 0014

#907-A, B: Not used (Fixed at "00")

#907-C: 1. In case of all individual and all cashier CCD, X report before CCD entry

2. Locking of REG mode entry after individual cashier resetting

3. Minus DEPT. / PLU

1. In case of all individual and all cashier CCD, X report before CCD entry	2. Locking of REG mode entry after individual cashier resetting	3. Minus DEPT. / PLU / EAN	907-C	
Disable	Disable	Disable	0	
		Enable	1	★
	Enable	Disable	2	
		Enable	3	
Enable	Disable	Disable	4	
		Enable	5	
	Enable	Disable	6	
		Enable	7	

#907-D: 1. Z-counter print for Clerk, Hourly, PLU, Cashier, PBLU, Daily net

2. CCD compulsory

1. Z-counter print	2. CCD compulsory	907-D	
Yes	Non compulsory	0	
	For individual cashier	1	
	For all cashier	2	
No	Non compulsory	4	★
	For individual cashier	5	
	For all cashier	6	

[JOB#908] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#908-A: Printing of GT on Z report

GT1 (NET)	GT2 (+)	GT3 (-)	908-A	
Print	Print	Print	0	★
		Skip	1	
	Skip	Print	2	
		Skip	3	
Skip	Print	Print	4	
		Skip	5	
	Skip	Print	6	
		Skip	7	

#908-B: Printing of GT on X report

GT1 (NET)	GT2 (+)	GT3 (-)	908-B	
Skip	Skip	Skip	0	★
		Print	1	
	Print	Skip	2	
		Print	3	
Print	Skip	Skip	4	
		Print	5	
	Print	Skip	6	
		Print	7	

#908-C: 1. Addition to the hourly total in void mode

2. X1/Z1 report at X2/Z2 mode

3. Resetting of consecutive number in Z1

1. Addition to the hourly total in void mode	2. X1/Z1 report at X2/Z2 mode	3. Resetting of consecutive No.in Z1	908-C	
No	Enable	No	0	★
		Yes	1	
	Disable	No	2	
		Yes	3	
Yes	Enable	No	4	
		Yes	5	
	Disable	No	6	
		Yes	7	

#908-D: 1. Printing X/Z report (Except the individual cashier and individual clerk report)

2. GT resetting at Z1 general resetting

1. Printing X/Z report	2. GT resetting at Z1	908-D	
Receipt & Journal	No	0	★
	Yes	1	
Journal	No	4	
	Yes	5	

[JOB#909] ER-A410: MRS = 2000
ER-A420: MRS = 2000

#909-A: 1. Printing of balance GT on the Z report

2. Printing of training GT on the X report

3. Printing of training GT on the Z report

1. Printing of balance GT on the Z report	2. Printing of training GT on the X report	3. Printing of training GT on the Z report	909-A	
YES	NO	YES	0	
		NO	1	
	YES	YES	2	★
		NO	3	
NO	NO	YES	4	
		NO	5	
	YES	YES	6	
		NO	7	

#909-B: 1. Printing of data on PLU resetting report

2. All Z1 resetting in X1/Z1 mode

1. Printing of data on PLU resetting report	2. All Z1 resetting in X1/Z1 mode	909-B	
Yes	Enable	0	★
	Disable	2	
No	Enable	4	
	Disable	6	

#909-C: 1. Printing of void made & MRG void in Z2 report

2. Printing of void made & MRG void in Z1 report

3. Balance GT resetting at Z1 general resetting

1. Printing of void made & MRG void in Z2 report	2. Printing of void made & MRG void in Z1 report	3. Balance GT resetting at Z1 general resetting	909-C	
YES	YES	NO	0	★
		YES	1	
	NO	NO	2	
		YES	3	
NO	YES	NO	4	
		YES	5	
	NO	NO	6	
		YES	7	

#909-D: 1. Clerk change during entry operation

2. Entry of clerk code compulsory

1. Clerk change during entry operation	2. Entry of clerk code compulsory	909-D	
Disable	No (After clerk Z1 only)	0	★
	Yes (Everytime)	2	
Enable	No (After clerk Z1 only)	4	
	Yes (Everytime)	6	

[JOB#910] ER-A410: MRS = 0200
ER-A420: MRS = 0200

#910-A: 1. Clerk name print on receipt when clerk is changed. (It is always print on Journal)

2. Overlaped cashier function. (This selection is available only for “Cashier only” system)

1. Clerk name print on receipt when clerk is changed.	2. Overlaped cashier function	910-A	
No	No	0	★
	Yes	1	
Yes	No	4	
	Yes	5	

#910-B: 1. Cashier/Clerk code display and print.

2. Auto cashier sign off at the end of transaction

1. Cashier/Clerk code display and print.	2. Auto cashier sign off at the end of transaction	910-B	
Hidden	No (After cashier Z1 only)	0	
	Yes (Everytime)	1	
Appear	No (After cashier Z1 only)	2	★
	Yes (Everytime)	3	

#910-C, D: Not used (Fixed at “00”)

[JOB#911] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#911-A: 1. Fraction treatment

1. Fraction treatment	911-A	
Round off	0	★
Round up unit	1	
Disregarding	2	

#911-B, C, D: Not used (Fixed at "000")

[JOB#912] ER-A410: MRS = 1141
ER-A420: MRS = 1140

#912-A: 1. Date print format

Date format	912-A	
Month/Day/Year	0	
Day/Month/Year	1	★
Year/Month/Day	2	

#912-B: 1. Time system

1. Time system	912-B	
12H	0	
24H	1	★

#912-C: 1. After transaction receipt format

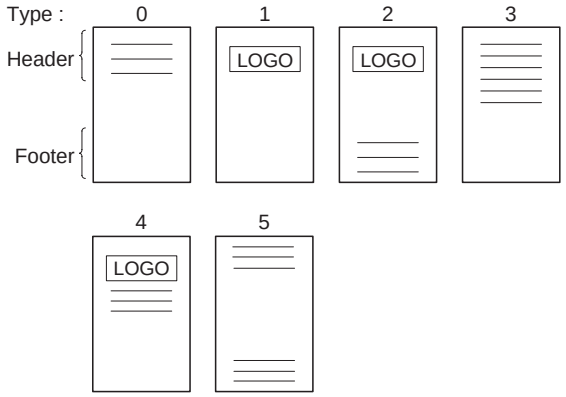
2. Copy receipt

3. Footer print control

1. After transaction receipt	2. Copy receipt	3. Footer print control	912-C	
Total only	No	All receipt	0	
		On selected function keys at the time of finalization	1	
	Yes	All receipt	2	
		On selected function keys at the time of finalization	3	
Detail	No	All receipt	4	★
		On selected function keys at the time of finalization	5	
	Yes	All receipt	6	
		On selected function keys at the time of finalization	7	

#912-D: 1. LOGO Message control.

1. LOGO Message control	912-D	
3-line header instead of a LOGO	0	★ (ER-A420)
Glaphical LOGO only	1	★ (ER-A410)
Glaphical LOGO and 3-line footer	2	
6-line header	3	
Glaphical LOGO and 3-line header	4	
3-line header and 3-line footer	5	



[JOB#913] ER-A410: MRS = 0002
ER-A420: MRS = 0002

#913-A: 1. Content of total VP amount

1. Content of total VP amount	913-A	
Total amount	0	★
Tendered amount	1	

#913-B: 1. Printing of subtotal by ST key

2. Escape the compulsory of VP and SLIP

∗ [•], [RCPT] keys to escape validation (MGR mode).

1. Printing of subtotal by ST key	2. Escape the compulsory of VP and SLIP	913-B	
No	Disable	0	★
	Enable	1	
Yes	Disable	4	
	Enable	5	

#913-C: 1. Buzzer off 2 sec. after lock error

2. Buffered keyboard

1. Buzzer off 2sec. after lock error	2. Buffered keyboard	913-C	
2-sec. off	Yes	0	★
	No	1	
Constant (Till error recovery)	Yes	2	
	No	3	

#913-D: 1. Drawer closing compulsory

2. Error mode

3. Key touch sound

1. Drawer closing compulsory	2. Error mode	3. Key touch sound	913-D	
Non-compulsory	All lock error	Enable	0	
		Disable	1	
	Mis operation (One shot error)	Enable	2	★
		Disable	3	
Compulsory	All lock error	Enable	4	
		Disable	5	
	Mis operation (One shot error)	Enable	6	
		Disable	7	

[JOB#914] ER-A410: MRS = 0100
ER-A420: MRS = 0100

#914-A: 1. Receipt issuing at no-sale

2. [NS] key separation from [TL] key for no-sale function

3. No-sale and EX drawer open

1. Receipt issuing at no-sale	2. [NS] key separation	3. No-sale and EX drawer open	914-A	
Enable	Yes	Enable	0	★
		Disable	1	
	No	Enable	2	
		Disable	3	
Disable	Yes	Enable	4	
		Disable	5	
	No	Enable	6	
		Disable	7	

#914-B: 1. No-sale after NON ADD code entry

1. No-sale after # entry	914-B	
Disable	0	
Enable	1	★

#914-C: 1. Void mode

1. Void mode	914-C	
Enable	0	★
Disable	2	

#914-D: 1. CHECK CASHING

1. CHECK CASHING	914-D	
Disable	0	★
Enable	2	

[JOB#915] ER-A410: MRS = 0020
ER-A420: MRS = 0020

#915-A, B: Not used (Fixed at "00")

#915-C: 1. ST (-), ST (%) as many times needed/operation only once

1. ST (-), ST (%) as many times needed/ operation only once	915-C	
Unlimited	0	
Once only	2	★

#915-D: Not used (Fixed at "0")

[JOB#916] ER-A410: MRS = 1000
ER-A420: MRS = 1000

#916-A: 1. Print format when and amount overlaps each other REG mode

1. Print format when and amount overlaps each other REG mode	916-A	
Truncate	0	
2 line print	1	★

#916-B: 1. Finalization by charge (credit) when ST is 0 or below

2. Tendering which is smaller than the sales amount

1. Finalization by charge (credit) when ST is 0 or below	2. Tendering which is smaller than the sales amount	916-B	
Disable	Enable	0	★
	Disable	2	
Enable	Enable	4	
	Disable	6	

#916-C: 1. Negative merchandise subtotal

2. Subtotal entry compulsory before tendering

3. Subtotal entry before direct non-tendering finalization

1. Negative merchandise subtotal	2. Subtotal entry compulsory before tendering	3. Subtotal entry before direct non-tendering finalization	916-C	
Allow	Noncompulsory	Non-compulsory	0	★
		Compulsory	1	
	Compulsory	Non-compulsory	2	
		Compulsory	3	
Disallow	Non-compulsory	Non-compulsory	4	
		Compulsory	5	
	Compulsory	Non-compulsory	6	
		Compulsory	7	

#916-D: 1. Coupon PLU printing on X/Z report

2. Net sales subtotal (NET1) printing on X/Z report

3. CHECK change total printing on X/Z report

1. Print coupon PLU's on general report	2. Print net sales SBTL (NET1) on general report	3. Print CHK CHANGE on general report	916-D	
Print	Print	Print	0	★
		Skip	1	
	Skip	Print	2	
		Skip	3	
Skip	Print	Print	4	
		Skip	5	
	Skip	Print	6	
		Skip	7	

[JOB#917] NOT USED: ER-A410: MRS = 0000
ER-A420: MRS = 0000

[JOB#918] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#918-A: 1. Printing of text of a tied PLU in set PLU

2. Direct non-tendering finalization after previous tender enter

1. Printting of a tied PLU in set PLU	2. Direct non-tendering finalization after previous tender enter	918-A	
YES	Disable	0	★
	Enable	2	
NO	Disable	4	
	Enable	6	

#918-B: Not used (Fixed at "0")

#918-C: 1. Printing of Z1/Z2 counter in Z reports

1. Printing of Z1/Z2 counter in Z reports	918-C	
Yes	0	★
No	4	

#918-D: Not used (Fixed at "0")

[JOB#919] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#919-A: Not used (Fixed at "0")

#919-B: 1. Checking of casher # on guest check when a reorder is made

2. Guest check No.

1. Checking of casher # on guest check when a reorder is made	2. Guest check No.	919-B	
YES	Auto generation	0	★
	Manual	1	
NO	Auto generation	4	
	Manual	5	

#919-C: 1. PBLU entry

2. Amount printing when PLU unit price is 0

1. PBLU entry	2. Amount printing when PLU unit price is 0	919-C	
Non compulsory	No	0	★
	Yes	1	
Compulsory	No	2	
	Yes	3	

#919-D: 1. Conversion ST printing of native ST

1. Conversion SBTL print of native SBTL	919-D	
Yes	0	★
No	4	

[JOB#920] NOT USED ER-A410: MRS = 0000
ER-A420: MRS = 0000

[JOB#921] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#921-A, B: Not used (Fixed at "00")

#921-C: 1. Vat shift operation timing duaring at transaction

1. Vat shift operation timing duaring at transaction	921-C	
Only at the start of transaction	0	★
During a transaction	2	

#921-D: Not used (Fixed at "0")

[JOB#922] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#922-A: Not used (Fixed "0")

#922-B: 1. Jornal print after SLIP/GC.RCPT

1. Jornal print after SLIP/GC.RCPT	922-B	
NO	0	★
YES	2	

#922-C, D: Not used (Fixed "00")

[JOB#923] NOT USED ER-A410: MRS = 0000
ER-A420: MRS = 0000

[JOB#924] NOT USED ER-A410: MRS = 0000
ER-A420: MRS = 0000

[JOB#925] NOT USED ER-A410: MRS = 0000
ER-A420: MRS = 0000

[JOB#926] ER-A410: MRS = 0400
ER-A420: MRS = 0400

#926-A: Not used (Fixed at "0")

#926-B: 1. Program reset at PGM2 mode

1. Program reset at PGM2 mode	926-B	
Disable	0	
Enable	4	★

#926-C: Not used (Fixed at "0")

#926-D: 1.Check VP

1. Check VP	926-D	
Normal	0	★
CHEQUE EURO	2	

[JOB#927] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#927-A: 1. Rounding up of the units digit of amount

#927-B: 1. Rounding down of the units digit of amount

1. Rounding the units digit of amount	927-AB	
Common destination	00	★
Netherland/Switzerland	82	
Norway	54	

#927-C: 1. Difference memory (Difference between before-rounding and after-rounding)

2. Limit on the least sighificant digit in entering the amount on item

1. Difference memory	2. Limit on the least significant digit in entering the amount on item	927-C	
No	Arbitary	0	★
	0 only	1	
	0 and 5 only	2	
Yes	Arbitary	4	
	0 only	5	
	0 and 5 only	6	

#927-D: 1. Application of rounding

2. Limit on the least significant digit in entering the amount of payment

1. Application of rounding	2. Limit on the least significant digit in entering the amount of payment	927-D	
Item & Payment	Arbitary	0	★
	0 only	1	
	0 and 5 only	2	
Payment	Arbitary	4	
	0 only	5	
	0 and 5 only	6	

[JOB#928] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#928-A: 1. Printing of slip LOGO text

1. Printing of slip LOGO text	928-A	
No	0	★
Yes	1	

#928-B: 1. VP massage printing on slip

2. Header line on slip paper when a reorder is made printed

1. VP massage printing on slip	2. Header line on slip paper when a reorder is made printed	928-B	
Check only	Printed	0	★
	Not	1	
Check & Credit	Printed	2	
	Not	3	

#928-C: 1. Printing of PLU on slip when it is 0

2. Printing of text of a tied PLU in set PLU on slip

1. Printing of PLU on slip when it is 0	2. Printing of text of a tied PLU in set PLU on slip	928-C	
YES	YES	0	★
	NO	2	
NO	YES	4	
	NO	6	

#928-D: 1. Printing of PB/NBAL on slip

2. Compulsory slip print system

1. Printing of PB/NBAL on slip	2. Compulsory slip print system	928-D	
YES	According to each media's preset (Slip printing at [FINAL] in PBLU system isn't always compulsory.)	0	★
	Compulsory for every entry	1	
	Compulsory for PB	2	
NO	According to each media's preset (Slip printing at [FINAL] in PBLU system isn't always compulsory.)	4	
	Compulsory for every entry	5	
	Compulsory for PB	6	

[JOB#929] ER-A410: MRS = 0000
ER-A420: MRS = 0000

#929-A: Not Used (Fixed at "0")

#929-B: 1. Message LOGO print on Journal

2. Z1 RESET of cashier with OPEN PBLU

1. Message LOGO print on Journal	2. Z1 RESET of cashier with OPEN PBLU	929-B	
No	Disable	0	★
	Enable	1	
Yes	Disable	2	
	Enable	3	

#929-C: Not used (Fixed at "0")

#929-D: 1. Taxable status of PLU which is set at "Non-taxable" by PGM.

1. Taxable status of PLU which is set at "Non-taxable" by PGM.	929-D	
According to its associated department	0	★
Non taxable	2	

[JOB#980] ER-A410: MRS = 0002
ER-A420: MRS = 0002

#918-A: Not used (Fixed at "0")

#980-B: 1. Australia rounding (Rounding only CASH finalize and change amount)
∗This selection is not effective at Manual Tax 1-4 system.

1. Australia rounding	980-B	
No (Not Rounding)	0	★
Yes (Rounding)	2	

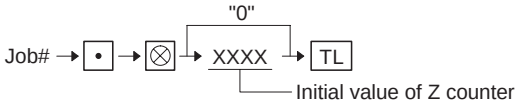
#980-C: Not used (Fixed at "0")

#980-D: 1. VAT/TAX assignment print

1. VAT/TAX assignment print	980-D	
Print	0	
Not	2	★

[JOB#930~939] ER-A410: MRS = 0000
ER-A420: MRS = 0000

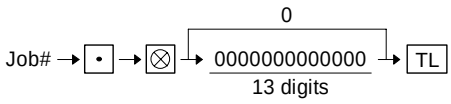
RESET REPORT COUNTER



JOB #	Function
930	Z1 report counter
932	Clerk Z1 report counter
933	Hourly Z1 report counter
934	PLU Z1 report counter
935	Cashier Z1 report counter
936	PBLU Z1 report counter
937	Z2 report counter
939	Daily net Z2 report counter

[JOB#942, 943] ER-A410: MRS = 0000000000000
ER-A420: MRS = 0000000000000

GT COUNTER PRESETTING

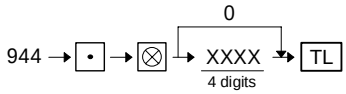


JOB #	Function
942	GT2 (Positive GT)
943	GT3 (Negative GT)

Note: GT1 is obtained by calculation
Equation: GT1=GT2-GT3

[JOB#944] ER-A410: MRS = 0000
ER-A420: MRS = 0000

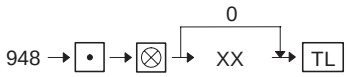
PGM2 mode secret code presetting



Note: When the secret code "0" is programmed, the secret code entry is inhibited.

[JOB#948] ER-A410: MRS = 00
ER-A420: MRS = 00

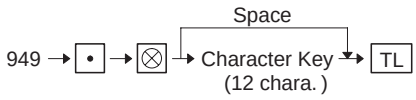
PROGRAMMING OF TRAINING CASHIER NO.



XX: Cashier No.

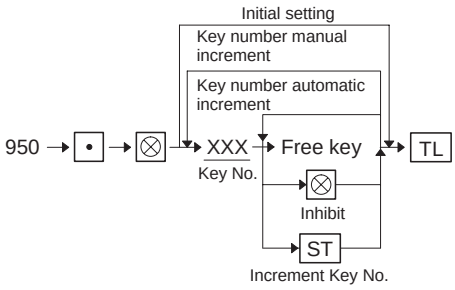
[JOB#949] ER-A410: MRS = "∗∗TRAINING∗∗"
ER-A420: MRS = "∗∗TRAINING∗∗"

THE TRAINING MODE'S TITLE



[JOB#950] MRS = STANDARD KEY LAYOUT

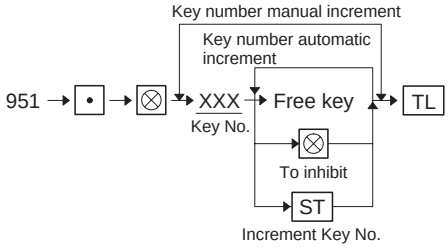
Free key layout (Except for department keys and direct PLU keys.)



XXX: 1 to 75
999 (for inhibit key)

[JOB#951] MRS = STANDARD KEY LAYOUT

Free key layout (department keys and direct PLU keys)



XXX: 1 to 119

999 (for inhibit key)

- Programming of the keys to be dept keys or direct PLU keys on the keyboard.
- Key No. is assigned to each key which is supposed to be dept. Key or direct PLU key by depressing the key after entering the key No.
- Those keys programmed by this job No. will be dept. keys if dept. code is assigned, and will be direct PLU keys if PLU code is assigned in the PGM2 mode.

FUNCTION KEY LIST

Key No.	KEY	KEY TEXT 1 2 3 4 5 6
1	0 KEY	0 KEY
2	1 KEY	1 KEY
3	2 KEY	2 KEY
4	3 KEY	3 KEY
5	4 KEY	4 KEY
6	5 KEY	5 KEY
7	6 KEY	6 KEY
8	7 KEY	7 KEY
9	8 KEY	8 KEY
10	9 KEY	9 KEY
11	00 KEY	00 KEY
12	000 KEY	000 KEY
13	DECIMAL POINT	. KEY
14	CLEAR	CLEAR
15	⊗	×
16	SUB TOTAL	SBTL
17	TOTAL	TOTAL
18	#	#
19	NO SALE	NS
20	PLU	PLU
21	G. C. COPY	GCCOPY
22	L1	L1
23	L2	L2
24	L3	L3
25	PRICE SHIFT	P.SFT
26	PRINT	VP
27	SLIP	SLIP
28	RCPT	RCPT
29	VOID	VOID
30	REFUND	RFND
31	%1	%1
32	%2	%2
33	%3	%3
34	%4	%4
35	(-) 1	(-) 1
36	(-) 2	(-) 2
37	(-) 3	(-) 3
38	(-) 4	(-) 4
39	VAT	VAT
40	AUTO	AUTO
41	AUTO2	AUTO2
42	AUTO3	AUTO3
43	AUTO4	AUTO4
44	AUTO5	AUTO5
45	CASH2	CA2
46	CHECK	CHECK
47	CHECK2	CHECK2
48	CHECK3	CHECK3
49	CHECK4	CHECK4
50	CREDIT1	CR1
51	CREDIT2	CR2
52	CREDIT3	CR3
53	CREDIT4	CR4
54	EX1	EX 1
55	EX2	EX 2
56	EX3	EX 3
57	EX4	EX 4
58	RA	RA
59	RA2	RA2
60	PO	PO
61	PO2	PO2
62	$^1/_2$	1/2 KEY
63	AMT	AMT
64	VAT SHIFT	VAT SF
65	DIFFER ST	DIF ST
66	CASHIER NO.	CASH #
67	CLERK NO.	CLK #
68	DEPT. NO.	DEPT#
69	PBLU	PBLU
70	NBAL	NBAL
71	FINAL	FINAL
72	DEPOSIT	DEPO
73	DEPOSIT RFND	DEP. RF
74	G.C. RCPT	GC RCP
75	CHECK PRINT	CHKPR
999	INHIBIT	

ER-A410/A420 KEY POSITION

ER-A410

	16	22	28	34	40	46	52	58	64	70	76	82
RECEIPT 05	JOURNAL 10	15	21	27	33	39	45	51	57	63	69	75	81
04	09	14	20	26	32	38	44	50	56	62	68	74	80
03	08	13	19	25	31	37	43	49	55	61	67	73	79
02	07	12	18	24	30	36	42	48	54	60	66	72	78
01	06	11	17	23	29	35	41	47	53	59	65	71	77

:FIXED KEY (NOT TO CHANGE)

ER-A420

RECEIPT 07	JOURNAL 14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119
06	13	20	27	34	41	48	55	62	69	76	83	90	97	104	111	118
05	12	19	26	33	40	47	54	61	68	75	82	89	96	103	110	117
04	11	18	25	32	39	46	53	60	67	74	81	88	95	102	109	116
03	10	17	24	31	38	45	52	59	66	73	80	87	94	101	108	115
02	09	16	23	30	37	44	51	58	65	72	79	86	93	100	107	114
01	08	15	22	29	36	43	50	57	64	71	78	85	92	99	106	113

:FIXED KEY (NOT TO CHANGE)

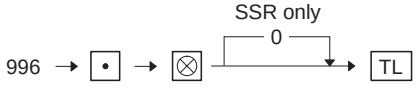
[JOB#975] MAX. Number programming

975 → [•] → [⊗] → X → [⊗] → YYYY → [TL]

	X	YYYY	MRS
MAX. Number of Department	1	1-99 (2 digit)	ER-A410 = 20, ER-A420 = 6
MAX. Number of PLU Record	2	0-1800 (4 digit)	500
MAX. Number of PBLU Record	3	0-1000 (4 digit)	0
MAX. Number of Clerk	4	0-20 (2 digit)	20
MAX. Number of Cashier	5	1-20 (2 digit)	20

[JOB#996, 998] RAM DATA BACKUP function (ECR ↔ ECR; 01FD/02FD Protocol)

- Sending ECR RAM data

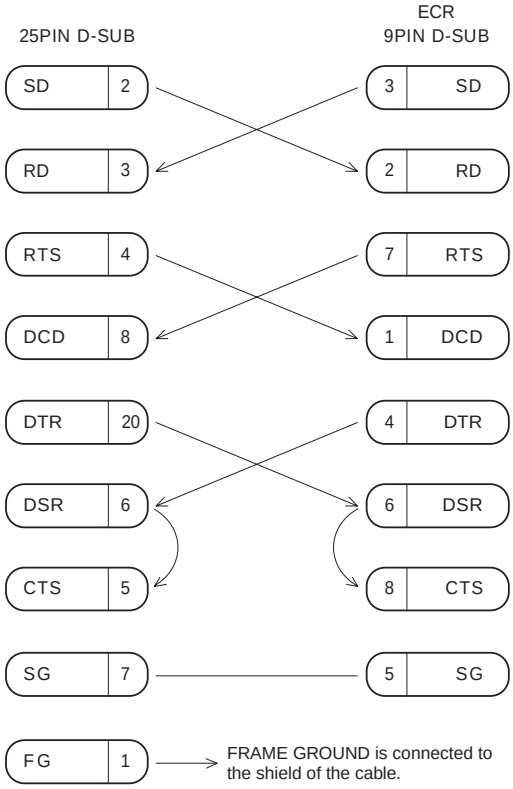


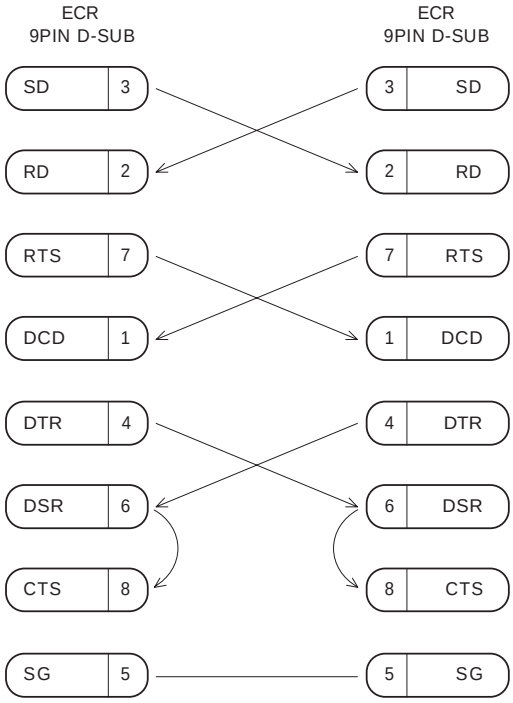
- Receiving ECR RAM data

998 → [•] → [⊗] → [TL]

∗Baud-rate is decided by SRV#903_A. It is not support auto baud-rate function.

[Signal connection chart]





SD: TRANSMITTED DATA
RD: RECEIVED DATA
DTR: DATA TERMINAL READY
DSR: DATA SET READY
RTS: REQUEST TO SEND
DCD: DATA CARRIER DETECTOR
CTS: CLEAR TO SEND
FG: FRAME GROUND

Display during transmission

SRV 996	TEXT, MODE JOB#, PACKET NO.
SRV 998	TEXT, MODE JOB#, PACKET NO.

At the end of the job, one of the following messages is printed.

- Normal termination of a send operation

#996 SEND OK	JOB#, ERROR MESSAGE

- Communication Error in a send operation

#996 COM. ERROR 01	JOB#, ERROR, MESSAGE, ERROR CODE

- Time-out in a send operation

#996 TIME OUT	JOB#, ERROR MESSAGE

- Normal termination of a receive operation

#998 RECEIVE OK	JOB#, ERROR MESSAGE

- Communication Error in a receive operation

#998 COM. ERROR 01	JOB#, ERROR MESSAGE, ERROR CODE

- Data format Error in a receive operation

#998 DATA ERROR 15	JOB#, ERROR MESSAGE, ERROR CODE

- Time-out in a receive operation

#998 TIME OUT	JOB#, ERROR MESSAGE

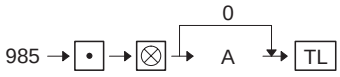
∗All error message are fixed.

∗ERROR CODE:

01 = ID No. error (ID No. in IDENQ is not correct.)
02 = Parity error
03 = Check sum error
04 = Data size error
05 = Hardware error
06 = Power off error
07 = Time out error
08 = DSR off error
11 = Transmit data size error
12 = Block sequence error (Irregular sequence No. has been received.)
13 = NAK code error (NAK code has been received.)
15 = ECR TYPE error (Models of two ECR is different.)

[JOB#985]

Euro symbol programming for TM-295

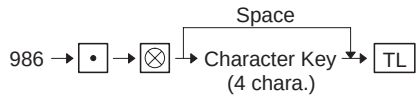


X: 0 = Space
1 = Euro symbol

MRS = 0 (Space)

[JOB#986] ER-A410: MRS = " ∗"
ER-A420: MRS = " ∗"

Domestic currency symbol programming



Characters can be entered by using character keys or numeric keys.

Please refer to section 4.

This symbol is printed with (+) amount of domestic currency. The programmed characters is printed at left side of amout.

Ex) Case of "DM":

DEPT.01 DM1.00

Programmed symbol

If some space characters are programmed at the left side of symbol (like " ∗"), they are not counted as the number of character of the currency symbol. (In case of " DM", the number of character is 2.)

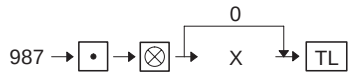
Ex) Case of " DM": (The currency symbol means "DM")

DEPARTMENT01 DM10.00

Programmed symbol

[JOB#987] ER-A410: MRS = 0
ER-A420: MRS = 0

Text Changing (To Default text)



X: 0 = English text
1 = German text
2 = French text
3 = Spanish text

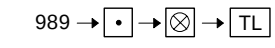
When this job is executed, below s are set as default data.

(a) Function text

(b) Each message text (LOGO, etc..)

[JOB#989]

Resetting of all counter and totalizer



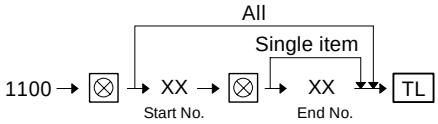
∗All counter, totalizer, all GTs, and all Z counter are reset.

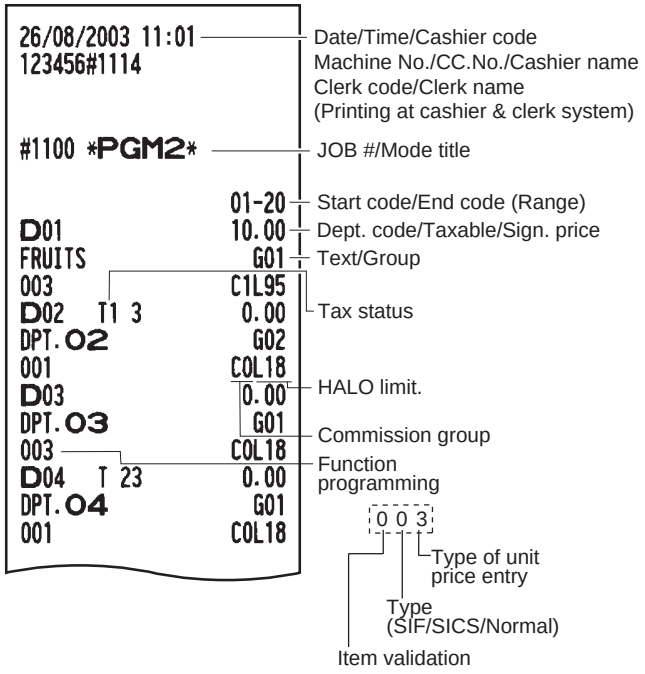
CHAPTER 2. PROGRAM (PGM2/PGM1) MODE

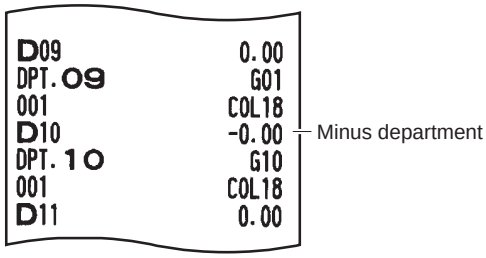
1. READING OF THE PGM MODE PROGRAM

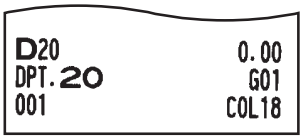
[JOB#1100] : DEPT reading

key operation



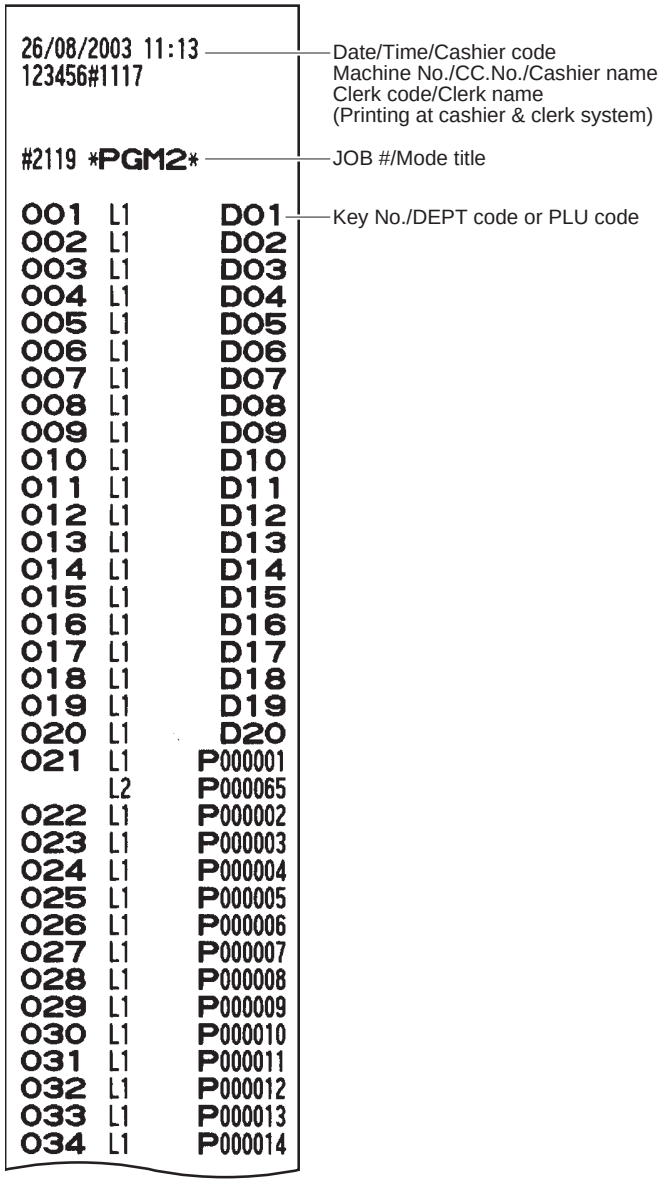


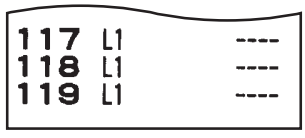




[JOB#2119] : DIRECT KEY READING REP.

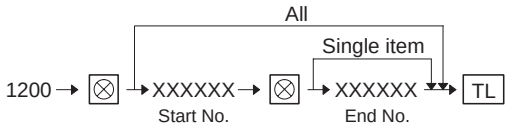
Key operation

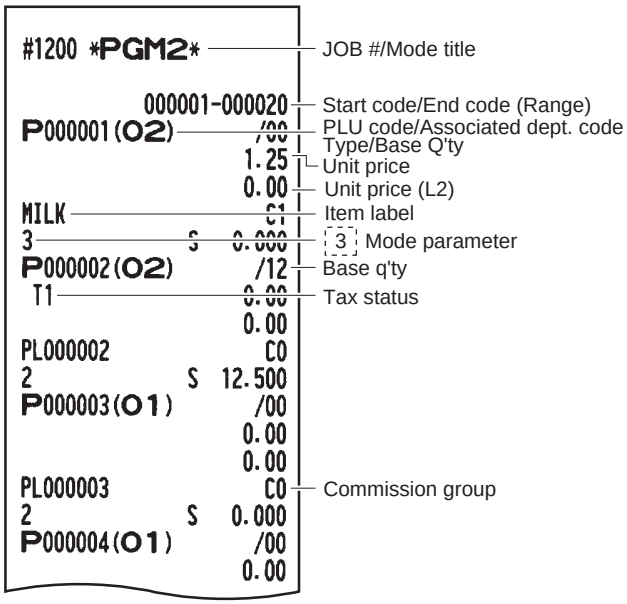


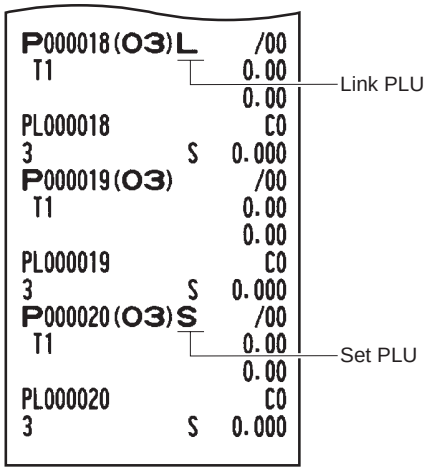


[JOB#1200] : PLU reading

Key operation

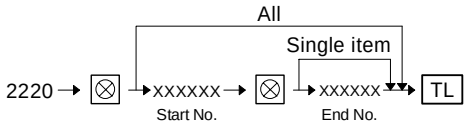


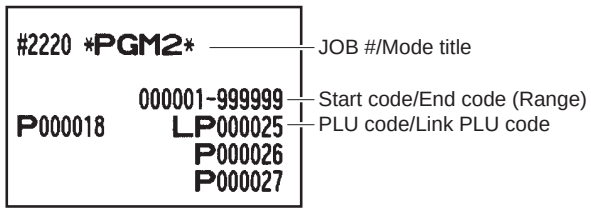




[JOB#2220] : LINK PLU PRESET OR READING

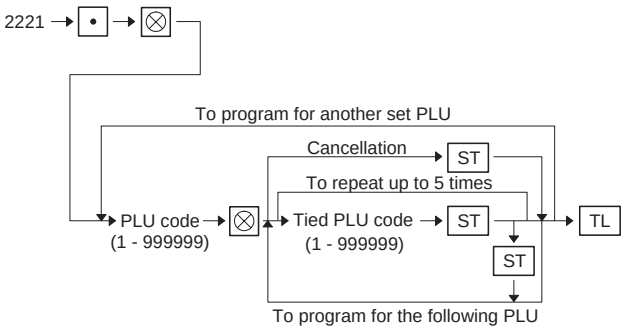
Key operation

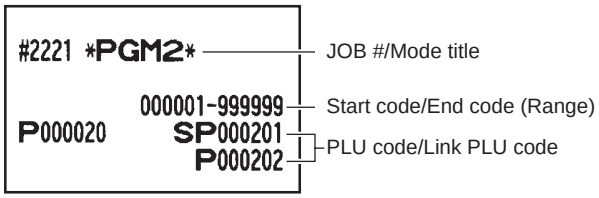




[JOB#2221]

Key operation

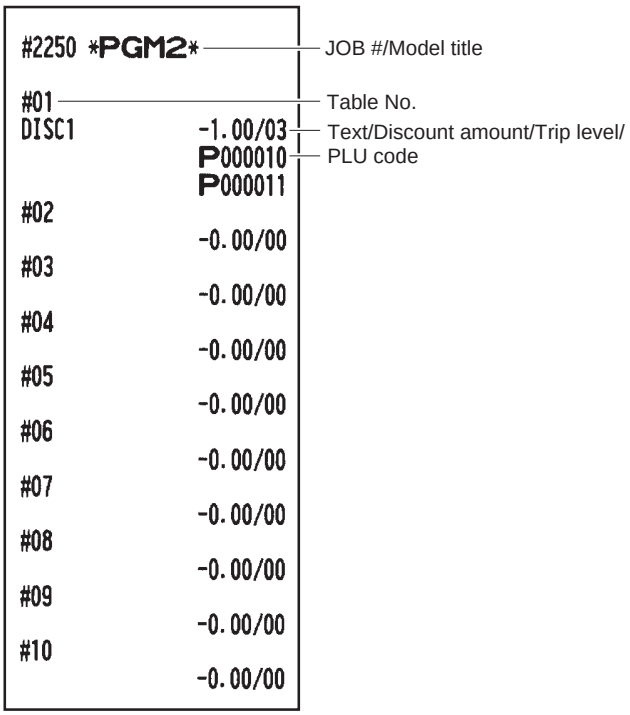




[JOB#2250] : PLU MIX & MACH PRESET OR READING

Key operation

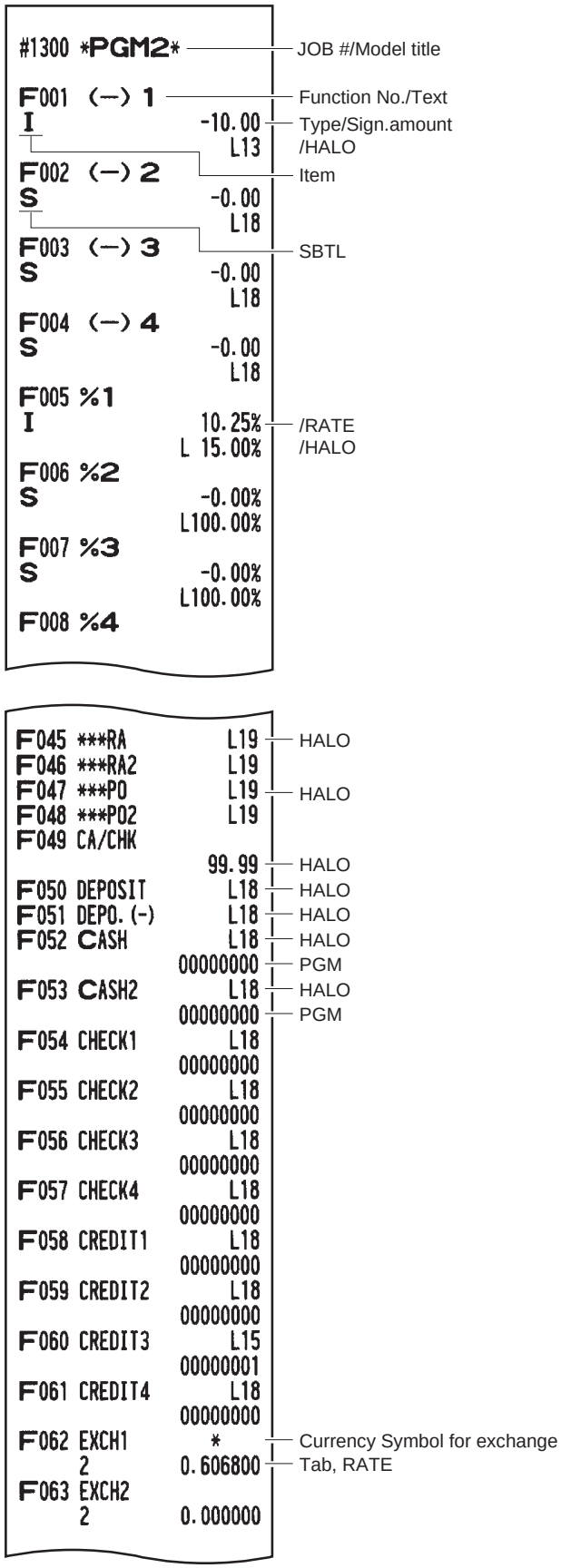
2250 → ⊗ → TL

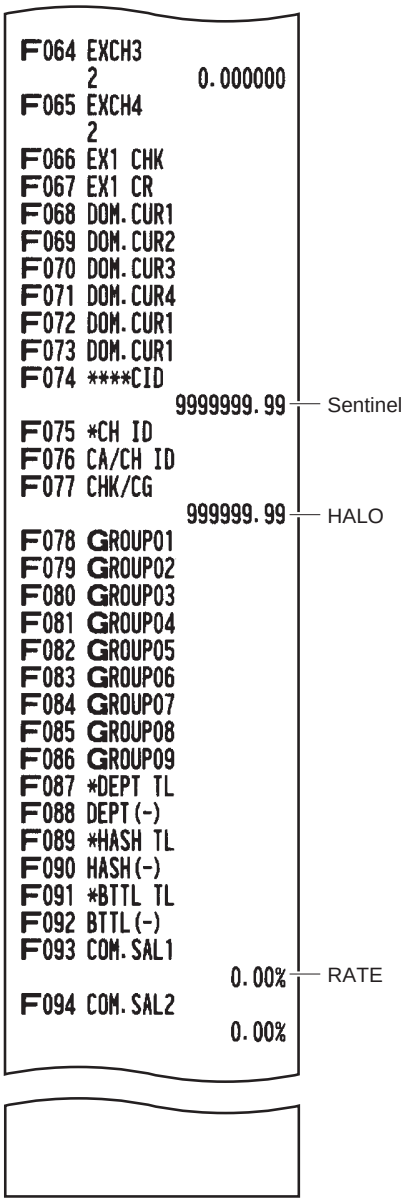


[JOB#1300] : FUNCTION PRESET READING REP.

Key operation

1300 → ⊗ → TL

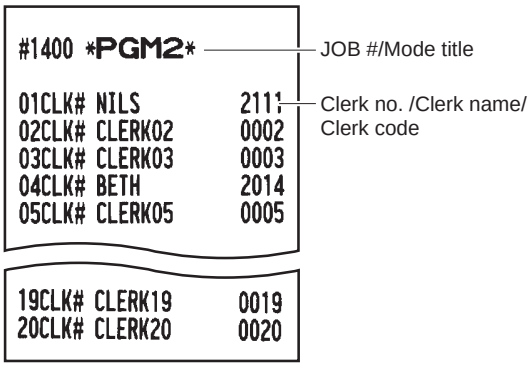




[JOB#1400]

Key operation

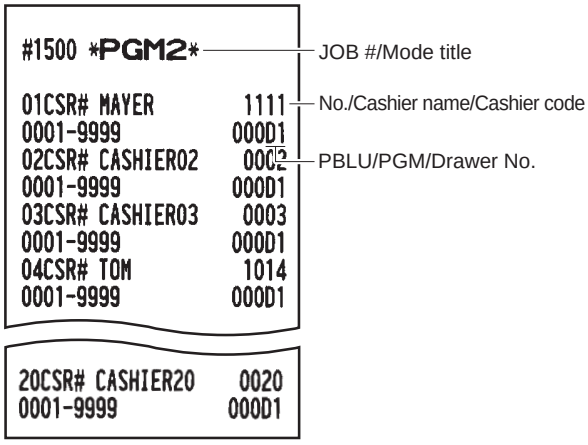
1400 → ⊗ → TL



[JOB#1500] : CASHIER READING REP.

Key operation

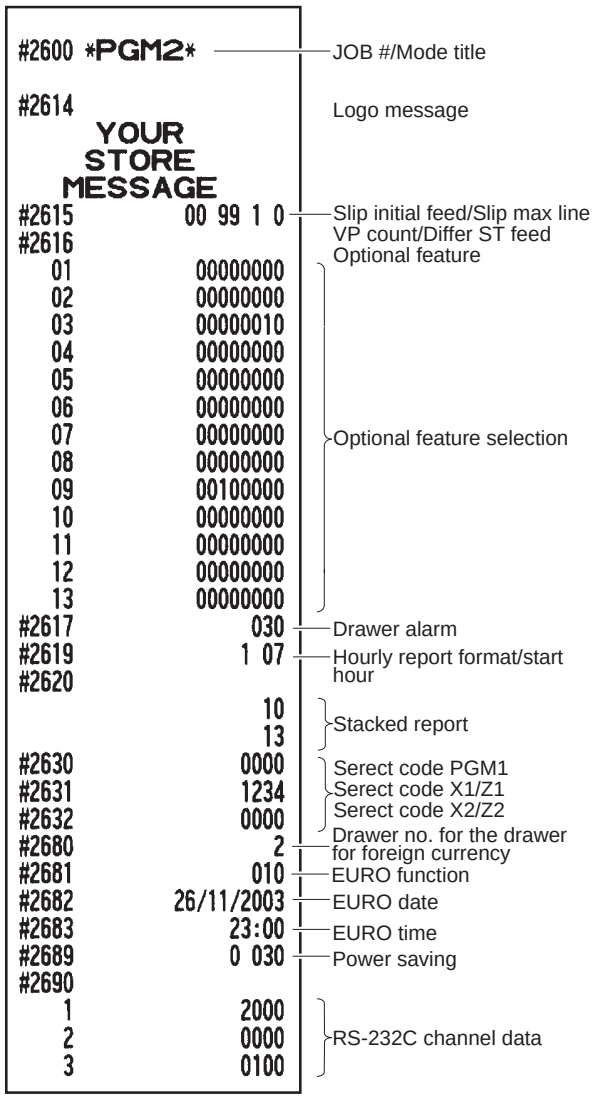
1500 → ⊗ → TL



[JOB#2600] : READING OF OTHER

Key operation

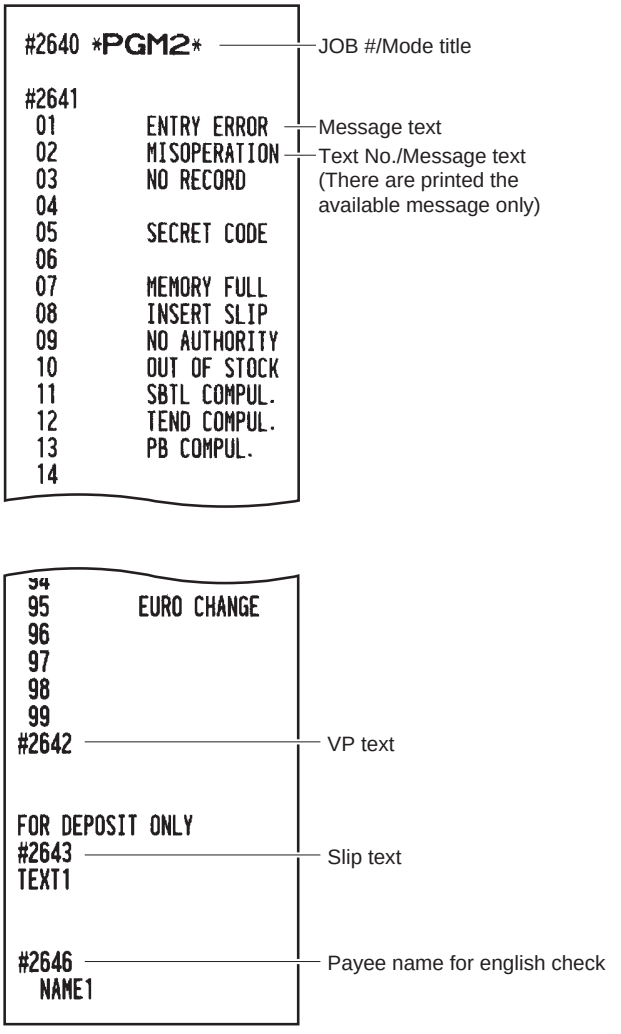
2600 → ⊗ → TL



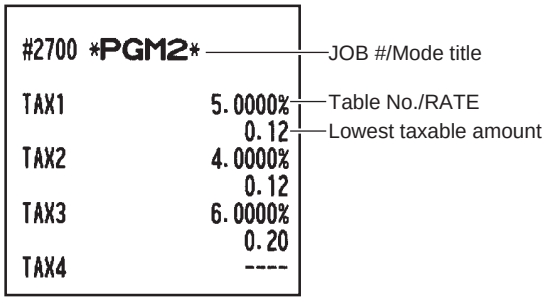
[JOB#2640] : SLIP TEXT PROGRAMMING READING

Key operation

2640 → ⊗ → TL



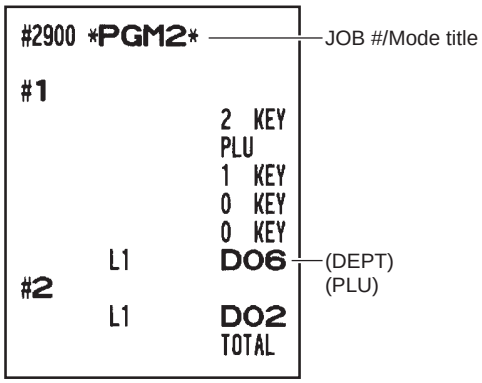
[JOB#2700]



[JOB#2900] : AUTO KEY READING

Key operation

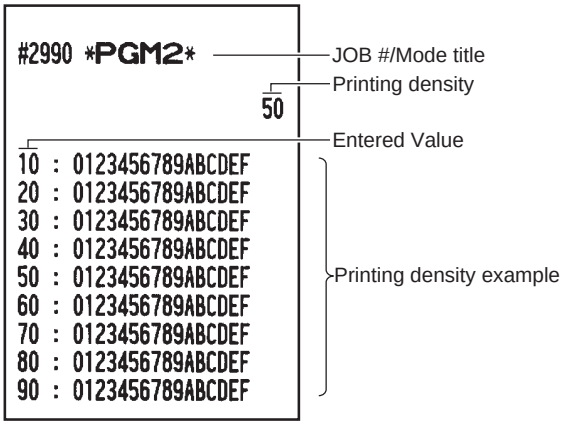
2900 → ⊗ → TL



[JOB#2990] : THERMAL PRINTER REPORT

Key operation

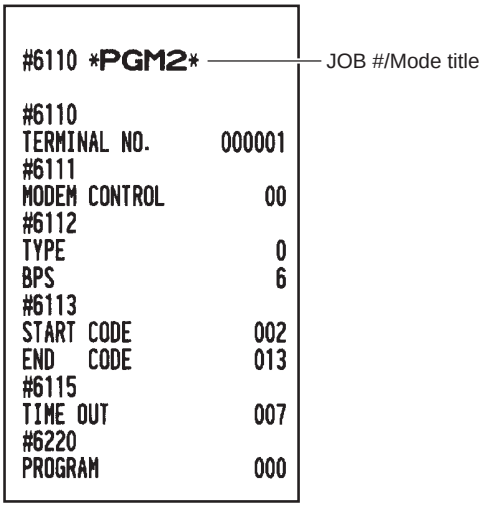
2990 → ⊗ → TL



[JOB#6110] : ONLINE PROGRAMMING READING REP.

Key operation

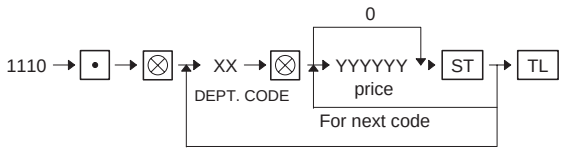
6110 → ⊗ → TL



2. PROGRAMMING

[JOB#1110]

PROGRAMMING OF DEPT. PRICE



XX: DEPT-CODE = 01~Max number of DEPT.

YYYYYY: PRICE = 0~999999

If a price is set for a department which amount entry type is “INHIBIT” or “OPEN”, its amount entry type is set as below automatically.

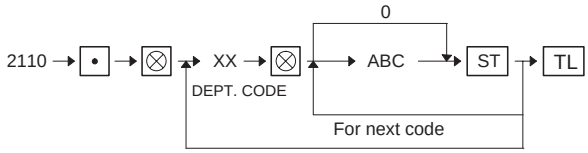
“PRESET” ← “INHIBIT”

“OPEN&PRESET” ← “OPEN”

MRS = 000000

[JOB#2110]

PROGRAMMING OF DEPT. FUNCTION



XX: DEPT. code = 01~Max number of DEPT.

A:	Item validation printing	B
	Non compulsory	0
	Compulsory	1

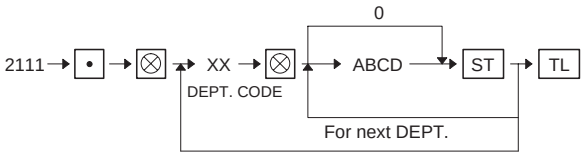
B:	SICS Function	E
	Normal	0
	Single item cash sale	1
	Single item finalize	2

C:	Amount entry type	G
	Inhibited	0
	Open	1
	Preset	2
	Open and preset	3

MRS = 001

[JOB#2111]

DEPT. TAX STATUS PROGRAMMING



XX: DEPT. CODE = 01~Max number of DEPT.

A:	Taxable 4	D
	Non taxable	0
	Taxable	1

B:	Taxable 3	E
	Non taxable	0
	Taxable	1

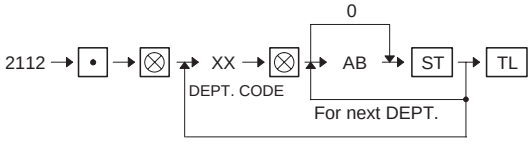
C:	Taxable 2	F
	Non taxable	0
	Taxable	1

D:	Taxable 1	G
	Non taxable	0
	Taxable	1

MRS = 0000

[JOB#2112]

DEPT. HALO (limit) preset



XX: DEPT. CODE = 01~Max number of DEPT.

A: Mantissa (HALO) = 0~9

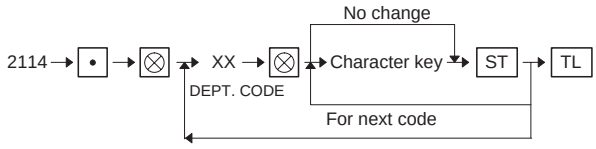
B: Exponent (HALO) = 0~8

∗Items A and B indicate $A \times 10^{B}$. Any amount below that value is enable within 99999999.

MRS = 18

[JOB#2114]

DEPT. TEXT PROGRAMMING



XX: DEPT. CODE = 01~Max number of DEPT.

Characters: Max. 16Characters

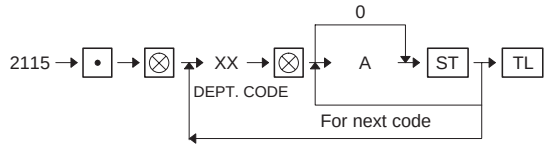
Characters can be entered by using character keys or numeric keys. The key entry sequence for entering one character by numeric key is as follows.

XXX → 00 KEY XXX: CHARACTER CODE (3 DIGITS)

MRS = DPT. X_X_

[JOB#2115]

COMMISSION GROUP PROGRAMMING

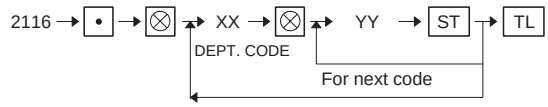


XX: DEPT. CODE = 01~Max number of DEPT.

A: Group No. = 0~9

[JOB#2116]

PROGRAMMING OF DEPT. GROUP



XX: DEPT. code = 01~Max number of DEPT.

YY: Group No. = 01 ~ 14

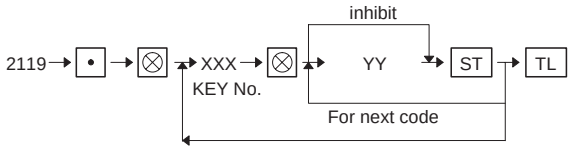
Group No.	Group name
01~09	Plus department
10	Minus department
11	Plus HASH department
12	Minus HASH department
13	Plus BR department
14	Minus BR department

MRS = 01

A selection of the group “Hash” is inhibited when the hash return function is programmed as disabled in SRV mode.

[JOB#2119]

DEPARTMENT CODE DEFINITION FOR DIRECT DEPT. KEYS



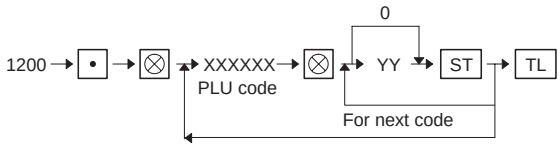
DEPT. code is assigned to the key no. which has been programmed in JOB#951 programming.

XXX: Key No.

YY: DEPT. CODE

[JOB#1200]

CREATING/ASSIGNING PLUS AND THE ASSOCIATED DEPARTMENTS.



XXXXXX: PLU code = 1~999999

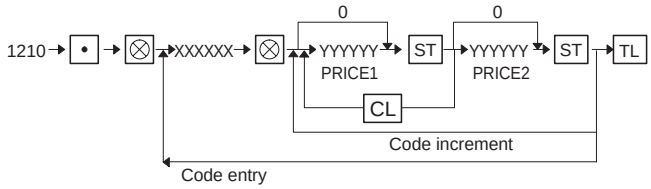
YY: DEPT. code = 01~Max number of DEPT.

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 01

[JOB#1210]

PLU UNIT PRICE PROGRAMMING



XXXXXX: PLU CODE = 1~999999

YYYYYY: Amount = 0~999999

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

If a price is set for a department which amount entry type is “INHIBIT” or “OPEN”, its amount entry type is set as below automatically.

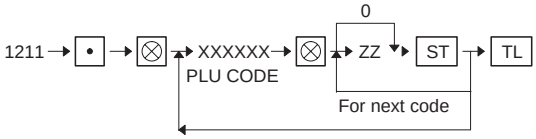
“PRESET” ← “INHIBIT”

“OPEN&PRESET” ← “OPEN”

MRS = 0

[JOB#1211]

PLU BASE Q'TY PROGRAMMING



XXXXXX: PLU code = 1~999999

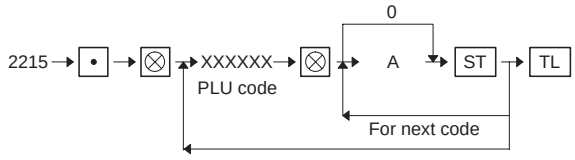
ZZ: Base quantity = 00~99

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 0

[JOB#2215]

COMMISSION GROUP PROGRAMMING



XXXXXX: PLU code = 1 ~ 999999

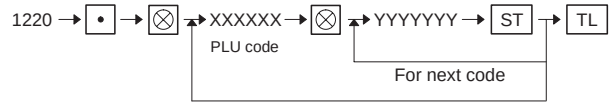
A: Group No. = 0 ~ 9

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 0

[JOB#1220]

PROGRAMMING OF PLU STOCK (ADD)



XXXXXX: PLU code (1 to 999999)

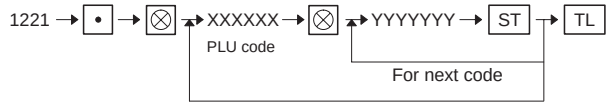
YYYYYYY: STOCK VALUE = 1 to 9999999

The stock value entered is added to the PLU stock counter.

MRS = 0

[JOB#1221]

PROGRAMMING OF PLU STOCK (SUB)



XXXXXX: PLU code (1 to 999999)

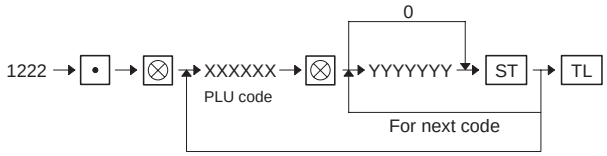
YYYYYYY: STOCK VALUE = 1 to 9999999

The stock value entered is subtracted the PLU stock counter.

MRS = 0

[JOB#1222]

PROGRAMMING OF PLU SOTCK (OVERWRITE)



XXXXXX: PLU code (1 to 999999)

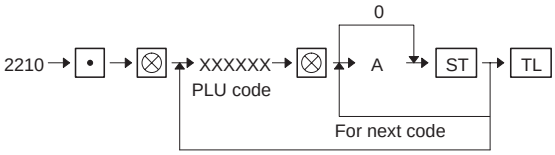
YYYYYYY: STOCK VALUE = 0 to 9999999

The stock value entered is overwritten the PLU stock counter.

MRS = 0

[JOB#2210]

PLU function programming



XXXXXX: PLU code = 1~999999

A:

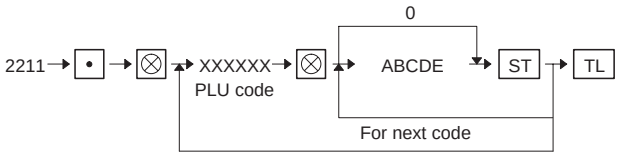
Amount entry type	A
Inhibited	0
Open	1
Preset	2
Open and preset	3
Delete	4

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 2

[JOB#2211]

PLU TAX STATUS PROGRAMMING



XXXXXX: PLU code = 1~999999

A:

Sign	A
+	0
–	1

B:

Taxable 6	B
Non taxable	0
Taxable	1

C:

Taxable 3	C
Non taxable	0
Taxable	1

D:

Taxable 2	D
Non taxable	0
Taxable	1

E:

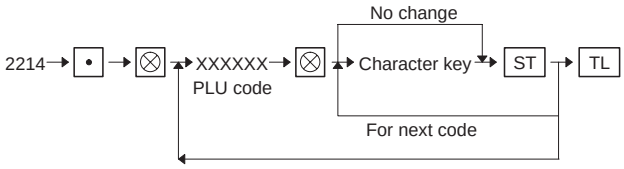
Taxable 1	E
Non taxable	0
Taxable	1

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 00000

[JOB#2214]

PLU TEXT PROGRAMMING



XXXXXX: PLU code (1 to 999999)

Characters: MAX. 16Characters

Characters can be entered by using character keys or numeric keys. The key entry sequence for entering one character by numeric keys is as follows:

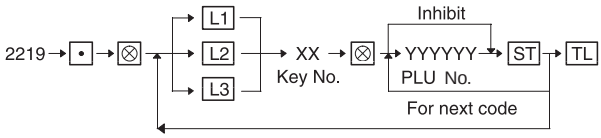
XXX → 00 KEY XXX: CHARACTER CODE (3 DIGITS)

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = PLXXXXXX

[JOB#2219]

PLU CODE DEFINITION FOR DIRECT PLU KEYS



∗First time = LEVEL1

The others = Same as previous level

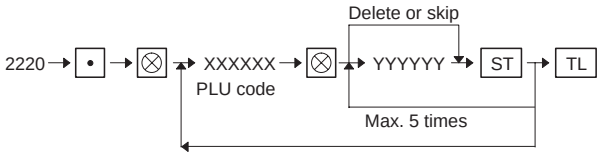
XX: Key No. (Assigned by SRV#951)

YYYYYY: PLU No. (1-999999)

MRS = STANDARD KEY LAYOUT

[JOB#2220]

LINKED PLU PROGRAMMING



XXXXXX: PLU code = 1~999999 max.

YYYYYY: PLU code = 1~999999 max.

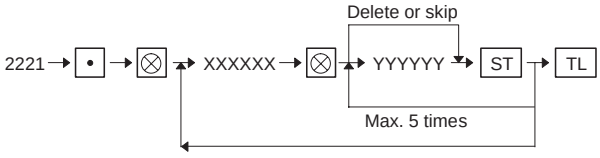
When the “ST” key is pressed without entering any number as the first PLU code (YYYYYY), the previous data is cleared.

PLU code should already be defined when they are used in programming here.

MRS = 0

[JOB#2221]

SET PLU (COMBO) programming



XXXXXX: Parent PLU code (1 to 999999 max.)

YYYYYY: Tied PLU code (1 to 999999 max.)

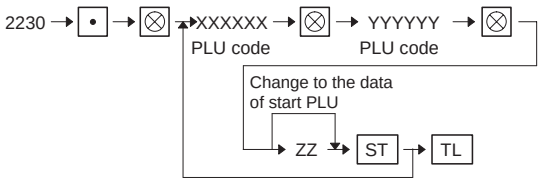
When the “ST” key is pressed without entering any number as the first PLU code (YYYYYY), the previous data is cleared.

PLU code should already be defined when they are used in programming here.

MRS = 0

[JOB#2230]

PLU CODE PROGRAMMING (range)



XXXXXX: Start PLU code = 1~999999

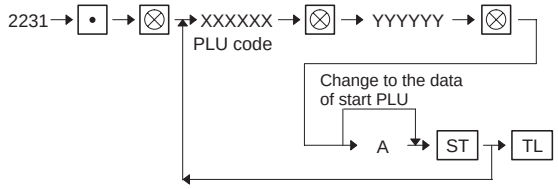
YYYYYY: End PLU code = 1~999999

ZZ: Dept. code = 1~Max number of DEPT.

It changes the data of PLU records only which exists in PLU file in the entered range of PLU code.

[JOB#2231]

PLU function programming (RANGE)



XXXXXX: Start PLU code = 1~999999

YYYYYY: End PLU code = 1~999999

A:

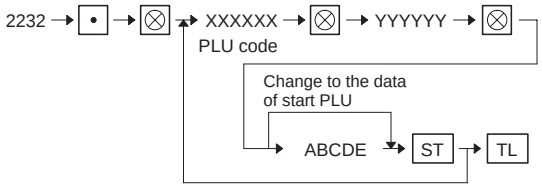
Amount entry type	A
Inhibited	0
Open	1
Preset	2
Open and preset	3
Delete	4

It changes the data of all PLU records in the entered range of PLU code.

If the record of entered range of PLU code is not in PLU file, it will be created in PLU file.

[JOB#2232]

PLU TAX STATUS PROGRAMMING (RANGE)



XXXXXX: Start PLU code = 1~999999

YYYYYY: End PLU code = 1~999999

A:

Sign	A
+	0
–	1

B:

Taxable 4	B
Non taxable	0
Taxable	1

C:

Taxable 3	C
Non taxable	0
Taxable	1

D:

Taxable 2	D
Non taxable	0
Taxable	1

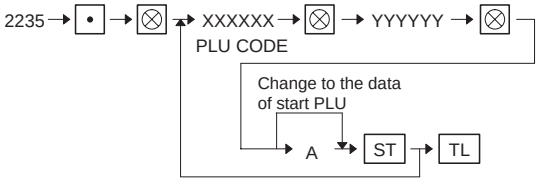
E:

Taxable 1	E
Non taxable	0
Taxable	1

It changes the data of PLU records only which exists in PLU file in the entered range of PLU code.

[JOB#2235]

COMMISSION GROUP PROGRAMMING (RANGE)



XXXXXX: Start PLU code = 1~999999

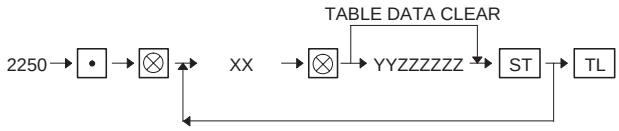
YYYYYY: End PLU code = 1~999999

A: Group No. = 0~9

It changes the data of PLU records only which exists in PLU file in the entered range of PLU code.

[JOB#2250]

MIX & MATCH (PROMOTION) PROGRAMMING



XX: TABLE No. (1-10)

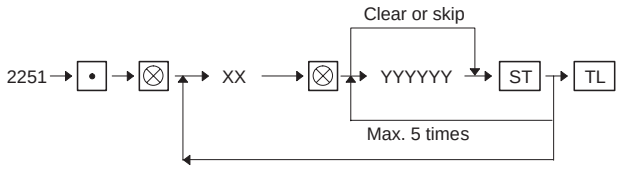
YY: TRIP LEVEL (1-99)

ZZZZZZ: DISCOUNT AMOUNT (1-999999)

MRS = NO TABLE DATA

[JOB#2251]

MIX & MATCH (PROMOTION) PROGRAMMING



XX: TABLE No. (1-10)

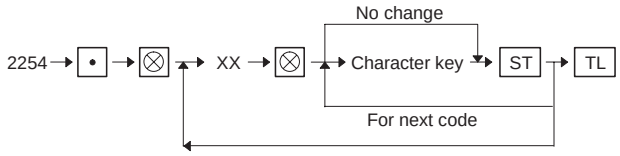
YYYYYY: PLU CODE (1-999999)

When the “ST” key is pressed without entering any number as the first PLU code (YYYYYY), the previous data is cleared.
When the “ST” key is pressed without entering any number after the 2’ nd PLU code (YYYYYY), the programming for current MIX & MATCH TABLE is finalized and the programming for next MIX & MATCH TABLE is started.
When the “ST” key is pressed after entering maximum times PLU code (YYYYYY), the programming for current MIX & MATCH TABLE is finalized and the programming for next MIX & MATCH TABLESET PLU is started.

MRS = NO TABLE DATA

[JOB#2254]

MIX & MATCH TEXT PROGRAMMING



XX: TABLE No. (1-10)

Characters: MAX. 12Characters

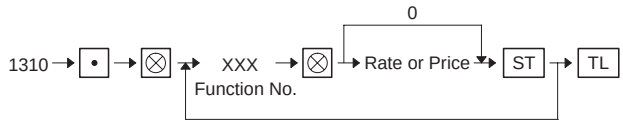
Characters can be entered by using character keys or numeric keys. The key entry sequence for entering one character by numeric keys is as follows:

XXX → 00 KEY XXX: CHARACTER CODE (3 DIGITS)

MRS = (all space)

[JOB#1310]

RATE PROGRAMMING



XXX: Function No.

(Rate or Price)

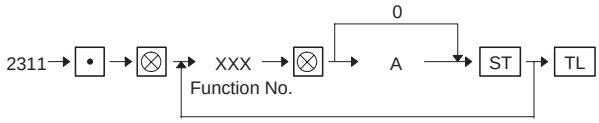
YYYYYY: Price for (–)
YYY.YY: Rate for %
YYY.YYYYYY: Rate for EXCHANGE

Function No.	Function	Entry range	Remarks
1	(–) 1	0 to 999999	unit price
2	(–) 2		
3	(–) 3		
4	(–) 4		
5	%1	0 to 100.00	% rate
6	%2		
7	%3		
8	%4		
62	Exchange 1	0 to 999.999999	Rate
63	Exchange 2		
64	Exchange 3		
93	Commission 1	0 to 999.99	Rate
94	Commission 2		
95	Commission 3		
96	Commission 4		
97	Commission 5		
98	Commission 6		
99	Commission 7		
100	Commission 8		
101	Commission 9		

MRS = 0

[JOB#2311]

MISCELLANEOUS KEY PROGRAMMING 1



XXX: Function No.

Function No.	Function
1	(–) 1
2	(–) 2
3	(–) 3
4	(–) 4
5	%1
6	%2
7	%3
8	%4

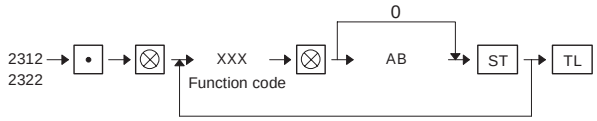
A:

Sign	A
+	0
–	1

MRS = 1

[JOB#2312, 2322]

HALO PROGRAMMING



XXX: Function No.
A: Mantissa (0 to 9)
B: Exponent (0 to 8)

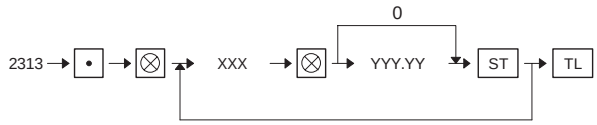
JOB#	Function No.	Function	Remarks
2312	1	(–) 1	Item B is specificable within the range from 0 to 8.
	2	(–) 2	
	3	(–) 3	
	4	(–) 4	
	45	RA	
	46	RA2	
	47	PO	
	48	PO2	
	50	DEPO (+)	
	51	DEPO (–)	
2322	52	CA1	Item B is specificable within the range from 0 to 8.
	53	CA2	
	54	CHK1	
	55	CHK2	
	56	CHK3	
	57	CHK4	
	58	CR1	
	59	CR2	
	60	CR3	
	61	CR4	

Entry range, system: $A \times 10^B$

MRS = 18

[JOB#2313]

MISCELLANEOUS KEY PROGRAMMING (% HALO)



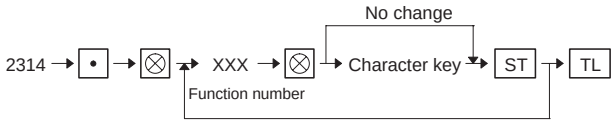
XXX: Function No.

YYY. YY: % HALO (0.00 ~ 100.00)

Function No.	Function
5	%1
6	%2
7	%3
8	%4

[JOB#2314]

TEXT PROGRAMMING FOR MISC. KEYS



XXX: Function code

Characters can be entered by using character keys or numeric keys. The key entery sequence for entering one character by numeric keys is as follows:

XXX → 00 key XXX: CHARACTER CODE (3DIGITS)

Max. 12Char.

FUNCTION LIST

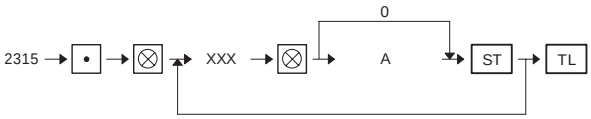
F-NO.	FUNCTION	DEFAULT TEXT 123456789012
1	(–) 1	(—) 1
2	(–) 2	(—) 2
3	(–) 3	(—) 3
4	(–) 4	(—) 4
5	%1	%1
6	%2	%2
7	%3	%3
8	%4	%4
9	NET1	NET1
10	DIFFER	DIFFER
11	TAXABLE1 ST	TAX1 ST
12	TAXABLE2 ST	TAX2 ST
13	TAXABLE3 ST	TAX3 ST
14	TAXABLE4 ST	TAX4 ST
15	VAT/TAX 1	VAT 1
16	VAT/TAX 2	VAT 2
17	VAT/TAX 3	VAT 3
18	VAT/TAX 4	VAT 4
19	TOTAL TAX (on Report)	TTL TAX
20	NET WITHOUT TAX (on Report)	NET
21	VAT SHIFT	VAT SFT
22	VAT/TAX DELETE	TAX DELE
23	NET2	NET2
24	SET PLU DISCOUNT	SETPLU-
25	PROMOTION DISCOUNT	DISCOUNT
26	COUPON PLU	CP PLU
27	REFUND	REFUND
28	VOID	∞
29	VOID MODE	∞MODE
30	MANAGER VOID	MGR∞
31	SBTL VOID	SBTL∞
32	HASH VOID	HASH∞
33	HASH REFUND	HASH RF
34	VP COUNTER	VP CNT
35	SLIP COUNTER	BILL CNT
36	NO SALE	NO SALE
37	PBAL	***PBAL
38	NBAL	***NBAL
39	G.C. COUNTER	G.C. COPY CNT
40	CUSTOMER (TRANS. COUNT)	GUEST
41	ORDER TOTAL	ORDER TL
42	PAID TOTAL	PAID TL
43	AVERAGE	AVE.
44	ODER TL-PAID TL	O—P
45	RA	***RA
46	RA2	***RA2
47	PO	***PO
48	PO2	***PO2
49	CHECK CASHING	CA/CHK
50	DEPOSIT (+)	DEPOSIT
51	DEPOSIT (–)	DEPO. (–)
52	CASH	CASH
53	CASH2	CASH2
54	CHECK1	CHECK1
55	CHECK2	CHECK2
56	CHECK3	CHECK3
57	CHECK4	CHECK4
58	CREDIT1	CREDIT1
59	CREDIT2	CREDIT2
60	CREDIT3	CREDIT3
61	CREDIT4	CREDIT4
62	EXCHANGE1	EXCH1
63	EXCHANGE2	EXCH2
64	EXCHANGE3	EXCH3
65	EXCHANGE4	EXCH4
66	EXCHANGE1 CHECK	EX1 CHK
67	EXCHANGE1 CREDIT	EX1 CR
68	DOMESTIC CURRENCY1	DOM. CUR1
69	DOMESTIC CURRENCY2	DOM. CUR2
70	DOMESTIC CURRENCY3	DOM. CUR3

F-NO.	FUNCTION	DEFAULT TEXT 123456789012
71	DOMESTIC CURRENCY4	DOM. CUR4
72	DOMESTIC CURRENCY FOR EX1 CHECK	DOM. CUR1
73	DOMESTIC CURRENCY FOR EX1 CREDIT	DOM. CUR1
74	CASH IN DRAWER	***CID
75	CHECK IN DRAWER	*CH ID
76	CASH/CHECK IN DRAWER	CA/CH ID
77	CHECK CHANGE	CHK/CG
78	GROUP1	GROUP01
79	GROUP2	GROUP02
80	GROUP3	GROUP03
81	GROUP4	GROUP04
82	GROUP5	GROUP05
83	GROUP6	GROUP06
84	GROUP7	GROUP07
85	GROUP8	GROUP08
86	GROUP9	GROUP09
87	(+) DEPT TOTAL	*DEPT TL
88	(–) DEPT TOTAL	DEPT (–)
89	HASH (+) DEPT TOTAL	*HASH TL
90	HASH (–) DEPT TOTAL	HASH (–)
91	BOTTLE (+) TOTAL	*BTTL TL
92	BOTTLE (–) TOTAL	BTTL (–)
93	COMMISSION SALE1	COM. SAL1
94	COMMISSION SALE2	COM. SAL2
95	COMMISSION SALE3	COM. SAL3
96	COMMISSION SALE4	COM. SAL4
97	COMMISSION SALE5	COM. SAL5
98	COMMISSION SALE6	COM. SAL6
99	COMMISSION SALE7	COM. SAL7
100	COMMISSION SALE8	COM. SAL8
101	COMMISSION SALE9	COM. SAL9
102	NON COMMISSION SALE	NON COM.
103	COMMISSION AMOUNT1	COM. AMT1
104	COMMISSION AMOUNT2	COM. AMT2
105	COMMISSION AMOUNT3	COM. AMT3
106	COMMISSION AMOUNT4	COM. AMT4
107	COMMISSION AMOUNT5	COM. AMT5
108	COMMISSION AMOUNT6	COM. AMT6
109	COMMISSION AMOUNT7	COM. AMT7
110	COMMISSION AMOUNT8	COM. AMT8
111	COMMISSION AMOUNT9	COM. AMT9
112	COMMISSION AMOUNT TOTAL	COM. TTL
113	CASH/CHECK IS	CA/CH IS
114	EXCHANGE1 IS	EXCH1 IS
115	EXCHANGE2 IS	EXCH2 IS
116	EXCHANGE3 IS	EXCH3 IS
117	CCD DIFFER	CCD DIF.
118	CCD DIFFER TOTAL	DIF. TL

F-NO.	FUNCTION	DEFAULT TEXT 123456789012
119	TOTAL	***TOTAL
120	SUBTOTAL	SUBTOTAL
121	OLD BALANCE	OLD BAL.
122	NEW BALANCE	BALANCE
123	DEPT. REPO. TITLE	DEPT
124	GROUP REPO. TITLE	GROUP
125	PLU REPO. TITLE	PLU
126	SET PLU REPO. TITLE	SET PLU
127	STOCK REPO. TITLE	STOCK
128	ZERO SALES REPO. TITLE	ZERO SALES
129	PRICE CATEGORY REPO. TITLE	CATEGORY
130	TRANS. REPO. TITLE	TRANS.
131	CID REPO. TITLE	TL-ID
132	COMMISSION REPO. TITLE	SALES
133	CCD REPO. TITLE	CCD
134	CLERK REPO. TITLE	CLERK
135	CASHIER REPO. TITLE	CASHIER
136	HOURLY REPO. TITLE	HOURLY
137	DAILY NET REPO. TITLE	DAILY
138	BALANCE REPO. TITLE	BALANCE
139	PBLU REPO. TITLE	PBLU
140	PBLU CODE TEXT	PBLU#
141	NON ADD CODE TEXT (8chara)	#
142	ENGLISH CHECK PRINT	CHECK PR
143	PLU ST (for Link PLU %)	PLU ST
144	ITEMS	ITEMS
145	MDSE SBTL	MDSE ST
146	NET (TAXABLE1-VAT1) (on RECEIPT)	NET 1
147	NET (TAXABLE2-VAT2) (on RECEIPT)	NET 2
148	NET (TAXABLE3-VAT3) (on RECEIPT)	NET 3
149	NET (TAXABLE4-VAT4) (on RECEIPT)	NET 4
150	DIFFER SUBTOTAL	DIFF ST
151	DUE (on DISPLAY)	DUE
152	CHANGE	CHANGE
153	COPY RCPT TITLE	COPY
154	G.C. COPY TITLE	G.C. COPY
155	G.C. RCPT TITLE	BILL
156	SLIP PRINT MESSAGE on JOURNAL	SLIP PR.
157	SLIP NEXT PAGE	NEXT P.
158	TOWN NAME 1	TOWNNAMETOWN
159	TOWN NAME 2 (4chara)	NAME
160	EX1 CHANGE (Display)	EX1 CHG

[JOB#2315]

MISCELLANEOUS KEY PROGRAMMING (%)



XXX: Function No.

Function No.	Function
5	%1
6	%2
7	%3
8	%4

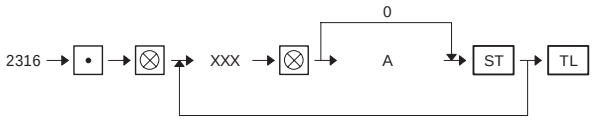
A:

% type	A
Subtotal %	0
Item %	1

MRS = 0

[JOB#2316]

MISCELLANEOUS KEY PROGRAMMING (–)



XXX: Function No.

Function No.	Function
1	(–) 1
2	(–) 2
3	(–) 3
4	(–) 4

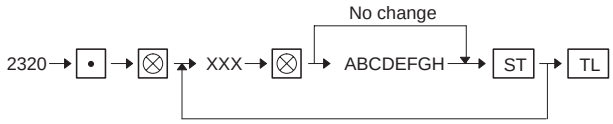
A:

(–) type	A
Subtotal (–)	0
Item (–)	1

MRS = 0

[JOB#2320]

MEDIA KEY PROGRAMMING



XXX: Function No.

Function No.	Function	A	B	C	D	E	F	G	H
52	CA1	×	○	○	○	○	○	○	○
53	CA2	×	○	○	○	○	○	○	○
54	CHK1	○	○	○	○	○	○	○	○
55	CHK2	○	○	○	○	○	○	○	○
56	CHK3	○	○	○	○	○	○	○	○
57	CHK4	○	○	○	○	○	○	○	○
58	CR1	○	○	○	○	○	○	○	○
59	CR2	○	○	○	○	○	○	○	○
60	CR3	○	○	○	○	○	○	○	○
61	CR4	○	○	○	○	○	○	○	○

∗Items marked with (○) are programmable.

A:

EFT function	A
Non compulsory	0
Compulsory	1

B:

SLIP print	B
Non compulsory	0
Compulsory	1

C:

Footer print on receipt	C
No	0
Yes	1

D:

Non-add code entry	D
Non compulsory	0
Compulsory	1

E:

Change due	E
Enable	0
Disable	1

F:

VP	F
Noncompulsory	0
Compulsory	1

G:

Drawer opening	G
Yes	0
No	1

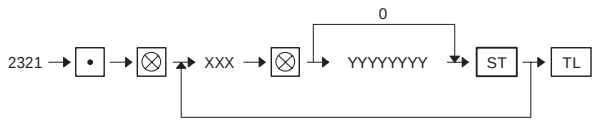
H:

Entry of amount tendered	H
Non compulsory (Cash,Check) Inhibit (Credit)	0
Compulsory	1

MRS=00000000

[JOB#2321]

MEDIA KEY FUNCTION PROGRAM (AMOUNT HALO)



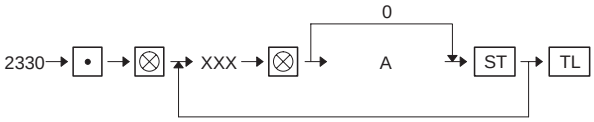
XXX: Function No.

YYYYYYYYY: Limitation amount

Func. No.	Function	Entry range	MRS
49	CA/CHK	0 to 99999999	99999999
74	CID (Sentinel)	0 to 999999999	999999999
77	CHK CHANGE	0 to 99999999	99999999

[JOB#2330]

FUNCTIONAL PROGRAMMING FOR EXCHANGE KEYS



XXX: Function No.

Function No.	Function
62	Exchange 1
63	Exchange 2
64	Exchange 3
65	Exchange 4

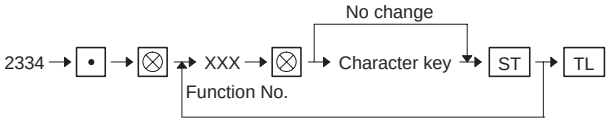
A:

TAB	A
0	0
0.0	1
0.00	2
0.000	3

MRS = 2 (Same as SRV#902_D)

[JOB#2334]

CURRENCY SYMBOL PROGRAMMING FOR EXCHANGE KEYS



XXX: Function No.

Function No.	Function	Range
62	Exchange 1	4 characters
63	Exchange 2	
64	Exchange 3	
65	Exchange 4	

Character can be entered by using character keys or numeric keys.

The key entry sequence for entering one character by numeric keys is as follows:

XXX → 00 KEY XXX: Character code (3 digits)

MRS = “space”

This symbol is printed with (+) amount of foreign currency. The programmed characters is printed at left side of amout.

Ex) Case of “DM”:

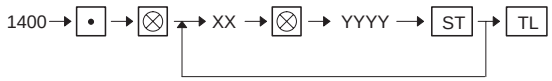
EXCH1 1.234567
DM1.23
Programmed symbol

If some space characters are programmed at the left side of symbol (like “ ∗”), they are not counted as the number of character of the currency symbol. (In case of “ DM”, the number of character is 2.)

Ex) Case of “ DM”: (The currency symbol means “DM”)

[JOB#1400]

CLERK CODE DIFINITION



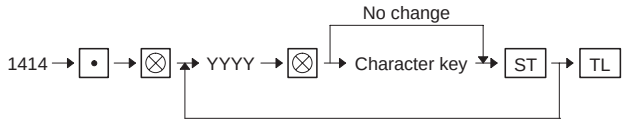
XX: Clerk No.= 1~20

YYYY: Clerk code = 1~9999

MRS = No record
(It is set same code as clerk No. when a clerk file is created.)

[JOB#1414]

CLERK NAME PROGRAMMING



YYYY: Clerk code = 1~9999

Characters can be entered by using character keys or numeric keys.

The key entry sequence for entering one character by numeric keys is as follows:

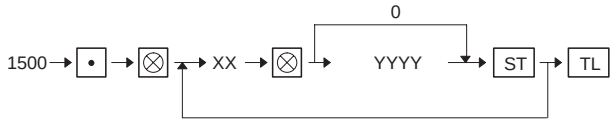
XXX → 00 KEY XXX: Character code (3 digits)

Max. 12 characters

MRS = No record
(It is set all space when a clerk file is created.)

[JOB#1500]

CASHIER CODE DEFINITION



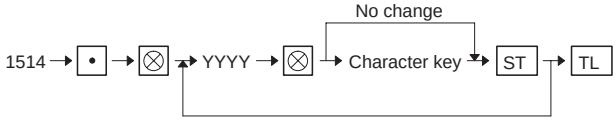
XX: Cashier No.= 1~20

YY: Cashier code = 1~9999

MRS = Same code as cashier No.

[JOB#1514]

CASHIER NAME PROGRAMMING



YYYY: Cashier code = 1~9999

Characters can be entered by using character keys or numeric keys. The key entry sequence for entering one character by numeric keys is as follows:

XXX → 00 KEY XXX: Character code (3 digits)

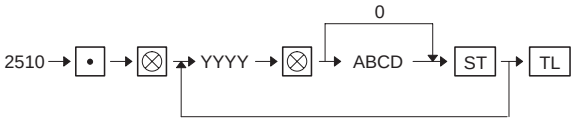
Please refer to section 4.

Max. 12 characters

MRS = 'Space'

[JOB#2510]

CASHIER PROGRAMMING



YYYY: Cashier code = 1~9999

A:

G.C. copy	A
Enable	0
Disable	1

B:

VAT shift	B
Not	0
State	1

C:

PRICE LEVEL	C
Price 1	0
Price 2	1

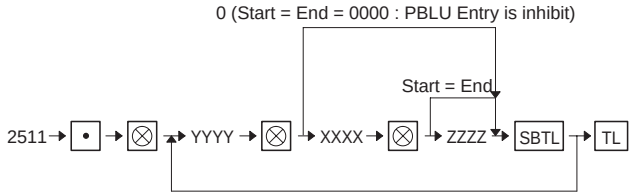
D:

Drawer No.	D
Not open	0
Drawer 1	1
Drawer 2	2

MRS = 0001

[JOB#2511]

CASHIER TABLE NO. (PBLU) LINK



YYYY: Casher code (01 to 9999)

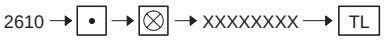
XXXX: Start code (1 to 9999)

ZZZZ: End code (1 to 9999)

MRS = 1-9999

[JOB#2610]

DATE SETTING



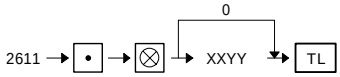
XXXXXXXX: YYYYMMDD or DDMMYYYY or MMDDYYYY
(YYYY: 2000~2099)
(MM: 01~12)
(DD: 01~31)

The date entry format complies with the applicable SRV-mode (SRV#912_A) programming.

MRS = 01/01/2000
(DDMMYYYY)

[JOB#2611]

TIME SETTING



XX: Hour (00~23)

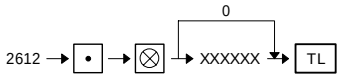
YY: Minute (00~59)

The date entry does not complies with SRV#912_B.

MRS = 00:00

[JOB#2612]

MACHINE NUMBER SETTING

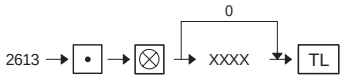


XXXXXX: Machine number (0~999999)

MRS = 000000

[JOB#2613]

CONSECUTIVE NUMBER SETTING

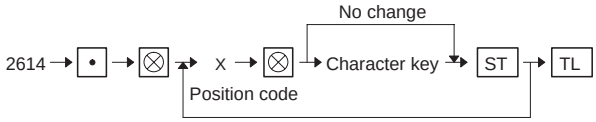


XXXX: Consecutive number (0000~9999)

MRS = 0000

[JOB#2614]

LOGO TEXT PROGRAMMING



X: 1~6:		
	1	(24 char.)
	2	(24 char.)
	3	(24 char.)
	4	(24 char.)
	5	(24 char.)
	6	(24 char.)

(1 Block max. 24 char.)

Character can be entered by using character keys or numeric keys.

The key entry sequence for entering one character by numeric keys is as follows:

XXX → 00 Key XXX: Character code (3 digits)

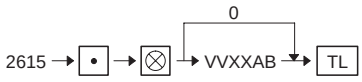
	(ER-A410)	(ER-A420)
Default =	SHARP PRESENTS THE ER-A410 SHARP IS THE BEST	SHARP PRESENTS THE ER-A420 SHARP IS THE BEST

Note: This programming is related to JOB# 912D programming.
The programable line has below relations with each key word at JOB# 912D.

"6-line header":	All 6 lines are programmable.
"3-line header":	Upper 3 lines (1st-3rd line) are programmable.
"3-line footer":	Lower 3 lines (4th-6th line) are programmable.
"Graphical LOGO only":	No line is programmable.

[JOB#2615]

Programming of the No. of times of validation printing and feed line after printing Differ ST.



VV: INITIAL SLIP FEED LINE = 0 to 64

XX: SLIP PRINT MAX LINE NO. = 0 to 99

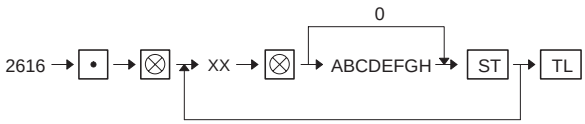
A: No. of times of validation printing = 0 to 9

B: Feed line after despression of differ subtotal key = 0 to 9

MRS = 009910

[JOB#2616]

OPTIONAL FEATURE



XX: 1 MRS = 00000000

A:

OP X/Z report	A
Enable	0
Disable	1

B:

PO operation in REG mode	B
Enable	0
Disable	1

C: Not used (Fixed at "0")

D:

"RFND" key entry in REG mode	D
Enable	0
Disable	1

E:

Direct void function in REG mode	E
Enable	0
Disable	1

F:

Indirect void in REG mode	F
Enable	0
Disable	1

G:	Subtotal void in REG mode	G
	Enable	0
	Disable	1

H:	Refund VP	H
	Non compulsory	0
	Compulsory	1

XX: 2 MRS = 00000000

A:	The first last item void	A
	Enable	0
	Disable	1

B:	PLU SHIFT LEVEL reset	B
	Auto	0
	Manual	1

C:	PLU LEVEL SHIFT	C
	REG & MGR	0
	MGR only	1

D:	Printing of the number of purchases	D
	No	0
	Yes	1

E:	Time print	E
	Yes	0
	No	1

F:	Printing of journal	F
	Full print	0
	Journal select	1

G:	Item VP	G
	Enable	0
	Disable	1

H	(–) VP	H
	Non compulsory	0
	Compulsory	1

XX: 3 MRS = 00000000

A: Not used (Fixed at “00”)

B:	Zero skip in Clerk report	B
	Yes	0
	No	1

C:	Zero skip in Cashier report	C
	Yes	0
	No	1

D:	Zero skip in Transaction report	D
	Yes	0
	No	1

E:	Zero skip in Dept. report	E
	Yes	0
	No	1

F:	Zero skip in PLU report	F
	Yes	0
	No	1

G:	Zero skip in Hourly report	G
	Yes	0
	No	1

H:	Zero skip in Daily net report	H
	Yes	0
	No	1

XX: 4 MRS = 00000000

A, B: Not used (Fixed at "00")

C:	Vat/Tax amount printing on R/J	C
	Yes	0
	No	1

D:	Taxable amount printing on R/J	D
	Yes	0
	No	1

E:	Net amount printing on R/J	E
	Yes	0
	No	1

F, G: Not used (Fixed at “00”)

H:	PLU SHIFT LEVEL AUTO reset timing. (Available when “X = 2, B = 0: PLU SHIFT LEVEL reset = AUTO”)	H
	1 item	0
	1 receipt	1

XX: 5 MRS = 00000000

A, B, C: Not used (Fixed at “000”)

D:	VAT shift system	D
	By cashier	0
	By shift key	1

E:	PLU PRICE SHIFT	E
	By shift key	0
	By cashier	1

F:	PLU PRICE SHIFT	F
	REG & MGR	0
	MGR only	1

G:	PLU PRICE LEVEL reset	G
	Auto	0
	Manual	1

H:

PLU PRICE LEVEL auto reset timing (Available when “PLU PRICE LEVEL reset =AUTO”)	H
1 item	0
1 receipt	1

XX: 6 MRS = 00000000

A:

VAT/TAX AMOUNT PRINTING on SLIP/G.C.RCPT	A
Print	0
Not print	1

B:

TAXABLE AMOUNT PRINTING on SLIP/G.C.RCPT	B
Print	0
Not print	1

C:

NET AMOUNT PRINTING on SLIP/G.C.RCPT	C
Print	0
Not print	1

D:

TIME PRINTING on SLIP/G.C.RCPT	D
Print	0
Not print	1

E, F, G, H: Not used (Fixed at "0000")

XX: 7 MRS = 00000000

A, B: Not used (Fixed at “00”)

C:

No sale in REG mode	C
Enable	0
Disable	1

D:

Finalization in REG mode when ST is zero	D
Enable	0
Disable	1

E, F, G, H: Not used (Fixed at "0000")

XX: 8 MRS = 00000000

A, B, C, D, E, F, G, H: Not used (Fixed at “0000000”)

XX: 9 MRS = 00000000

A: Not used (Fixed at “0”)

B:

EXCHANGE 1 calculation method	B
Multiplication	0
Division	1

C:

CHECK, CREDIT operation for EX1	C
No	0
Yes	1

D:

Printing of EX1 amount for Total and Change	D
No	0
Yes	1

E:

Printing of EX1 amount for Total VP	E
No	0
Yes	1

F. G: Not used (Fixed at "00")

H:

Footer graphic LOGO printing at the end of receipt	H
No	0
Yes	1

XX: 10 MRS = 00000000

A, B, C, D, E, F, G, H: Not used (Fixed at “0000000”)

XX: 11 MRS = 00000000

A, B, C, D, E, F, G, H: Not used (Fixed at “0000000”)

XX: 12 MRS = 00000000

A, B, C, D, E, F, G, H: Not used (Fixed at “0000000”)

XX: 13 MRS = 00000000

A:

Credit totalizer update if RA/PO finalized by Credit key	A
No	0
Yes	1

B:

Separator line in report	B
1 line	0
Separator line	1

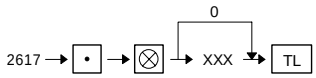
C:

Link PLU print format in REG/MGR mode	C
Each PLU	0
Parent PLU text with total amount	1

D, E, F, G, H: Not used (Fixed at "00000")

[JOB#2617]

PROGRAMMING OF THE TIME INTERVAL FOR THE DRAWER ALARM

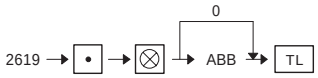


XXX: 0 ~ 255 sec

MRS = 000

[JOB#2619]

HOURLY REPORT (Starting time)



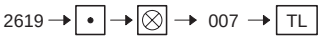
A:

Memory format	A
30 minutes (24 hour)	0
60 minutes (24 hour)	1

BB: Starting time (hour): 00~23

MRS = 000

ex)



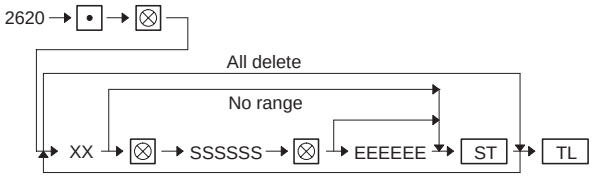
X1 Hourly report (#160) (30 min, start time = 7)

```
#160
    7:00
      (DATA)
    7:30
      (DATA)
 SUBTOTAL
      (DATA)
       |
   23:30
      (DATA)
 SUBTOTAL
      (DATA)
    0:00
      (DATA)
    0:30
      (DATA)
 SUBTOTAL
      (DATA)
       |
    6:30
      (DATA)
 SUBTOTAL
      (DATA)
```

24 hours started from 7:00

[JOB#2620]

STACK REPORT



XX: JOB#

SSSSSS: Start code

EEEEEE: End code

JOB#	REPORT NAME	TYPE
00	General	
10	DEPT.	
13	DEPT. All group	
20	PLU	RANGE
24	PLU stock	RANGE
27	PLU zero sales	
29	PLU category	RANGE
30	Transaction	
31	CID	
32	Commission sales	
40	All clerk	
50	All cashier	
60	Hourly	ALL
		RANGE (only X report)
70	Daily net	
80	PBLU	RANGE
82	BALANCE	

[∗∗]

Max. 70 step are programmable. “1 step” means the memory size used for one no range type JOB#.

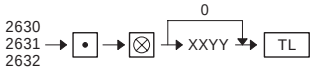
The RANGE type JOB# means “8 steps”.

For example)

The memory size for programming JOB#00, 20 and 50 is 10 steps. (ie. 1 step for JOB#00, 8 step for JOB#20, and 1 step for JOB#50.)

[JOB#2630, 2631, 2632]

SECRET CODE PROGRAMMING



#2630: PGM1 mode

#2631: X1/Z1 mode

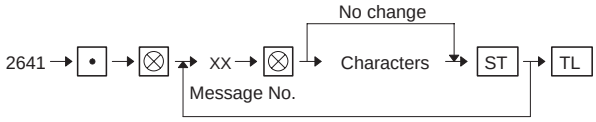
#2632: X2/Z2 mode

∗If “0” is entered, “compulsory secret code entry” is canceled.

MRS = 0

[JOB#2641]

MESSAGE TEXT PROGRAMMING



XX: Message No. = 1 to 99

A message is 12 CHARACTERS

No.	Description	MRS
1	Registration error	ENTRY ERROR
2	Misoperation error	MISOPRATION
3	Desired code is not programmed yet.	NO RECORD
4	(Reserved)	
5	Secret code error	SECRET CODE
6	(Reserved)	
7	Memory is full	MEMORY FULL
8	Insert slip paper	INSERT SLIP
9	The cashier has entered a code for which he or she is not authorized.	NO AUTHORITY
10	Stock is empty	OUT OF STOCK
11	Compulsory of pushing the SBTL key	SBTL COMPUL.
12	Compulsory of tendering	TEND COMPUL.
13	PBLU entry compulsory	PB COMPUL.

No.14~21 are all reserved.

No.	Description	MRS
22	Overlapped cashier error	CASHIER ERR.
23	Cashier resetting over error	ENTRY ERR CA
24	(Resaved)	
25	(Resaved)	
26	(Resaved)	
27	Power off	POWER OFF
28	(Resaved)	
29	(Resaved)	
30	(Resaved)	
31	Non ADD code entry compulsory	# COMPULSORY
32	The cashier/clerk key is not assigned.	NOT ASSIGNED
33	(Resaved)	
34	Overflow limitation	OVER LIMIT.
35	The open price entry is inhibited.	INH. OPEN PR
36	The unit price entry is inhibited	INH. UNIT PR
37	The direct non-tendering finalization after previous tender entry is inhibited.	NOT NON-TEND

No.38~47 are all reserved.

No.	Description	MRS
48	(Reserved)	

No.49~66 are all reserved.

No.	Description	MRS
67	REG buffer full	BUFFER FULL

No.68~71 are all reserved.

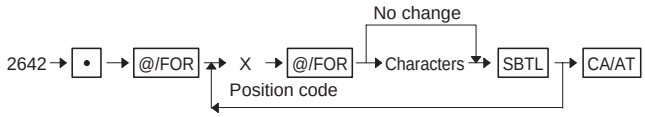
No.	Description	MRS
72	EFT ERROR	EFT ERROR
73	EFT BREAK	EFT BREAK
74	(Reserved)	
75	(Reserved)	
76	Close drawer error	CLOSE DRAWER

No.77~80 are all reserved.

No.	Description	MRS
81	Enter secret code	ENTR SECRET#
82	(Reserved)	
83	(Reserved)	
84	DATA BACKUP send success	SEND OK
85	DATA BACKUP receive success	RECEIVE OK
86	DATA BACKUP communication error	COM. ERROR
87	DATA BACKUP data format error	DATA ERROR
88	DATA BACKUP timeout error	TIME OUT
89	(Reserved)	
90	(Reserved)	
91	(Reserved)	
92	(Reserved)	
93	(Reserved)	
94	(Reserved)	
95	EURO CHANGE COMPULSORY	EURO CHANGE
96	(Reserved)	
97	(Reserved)	
98	(Reserved)	
99	(Reserved)	

[JOB#2642]

VP TEXT PROGRAMMING



X: Position code = 1 to 3

1 BLOCK MAX. 24 CHARACTERS

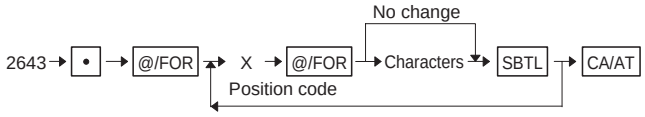
MRS = “ “

“ “

“FOR DEPOSIT ONLY”

[JOB#2643]

SLIP TEXT PROGRAMMING



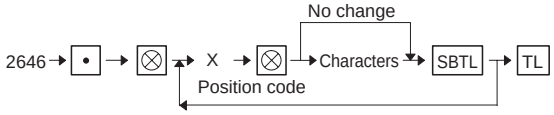
X: Position code = 1 to 3

1 BLOCK MAX. 24 CHARACTERS

MRS = "Space"
"Space"
"Space"

[JOB#2646]

PAYEE NAME FOR ENGLISH CHECK PROGRAMMING



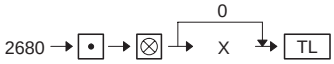
X: Position code =1 to 2

1 BLOCK MAX. 21 CHARACTERS

MRS = "Space"
"Space"

[JOB#2680]

PROGAMMING FOR EXCHANGE DRAWER

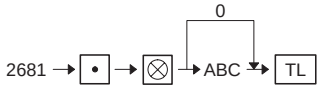


X:	DRAWER No.	X
	Non	0
	#1	1
	#2	2

MRS = 0

[JOB#2681]

EURO FUNCTION



A:	Automatic converting the unit price at EURO	A
	Yes	0
	No	1

B:	The EURO CHANGE JOB at EURO DATE/TIME	B
	Compulsory	0
	Non-compulsory	1

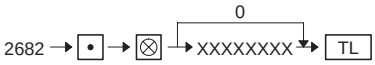
C:	EX1 Fractional treatment	C
	Raising to unit	0
	Rount off (4-DOWN, 5-UP)	1

MRS = 000

[JOB#2682]

EURO DATE

Timing of changing the currency between LOCAL and EURO



XXXXXXXX: DATE

(DATE) YYYYMMDD (Year-month-day) or
DDMMYYYY (Day-month-Year) or
MMDDYYYY (Month-day-Year)
[YYYY: 2000-2099] [MM: 01-12] [DD: 01-31]

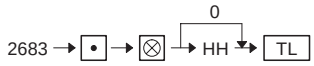
The date entry format complies with SRV#912_A.
In case of date/time setting is 0, EURO date/time function is not work.

MRS = 000000

[JOB#2683]

EURO TIME (hour only)

Timing of changing the currency between LOCAL and EURO

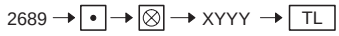


HH: Hour (0-23)

MRS = 00

[JOB#2689]

POWER SAVING



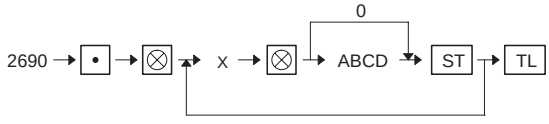
X:	POWER SAVING function when a time is displayed	X
	Yes	0
	No	1

YYY: POWER SAVING TIME to POWER OFF = 001-254 (minutes)
or 999 (Inhibit)

MRS = 0030

[JOB#2690]

THE ASSIGNMENT OF RS232 FUNCTION BY EACH DEVICES



X: 1 MRS = 0000

A:	Channel No. for on-line	A
	Not connect	0
	RS port 1	1
	RS port 2	2

B, C, D: Not used (Fixed at "000")

X: 2 Not used (Fixed at “0000“) MRS = 0000

X: 3 MRS = 0000

A: Not used (Fixed at “0”)

B:		
	Channel No. for slip printer	B
	Not connect	0
	RS port 1	1
	RS port 2	2

C, D: Not used (Fixed at “00”)

∗ EFT FUNCTION always uses RS port 2.

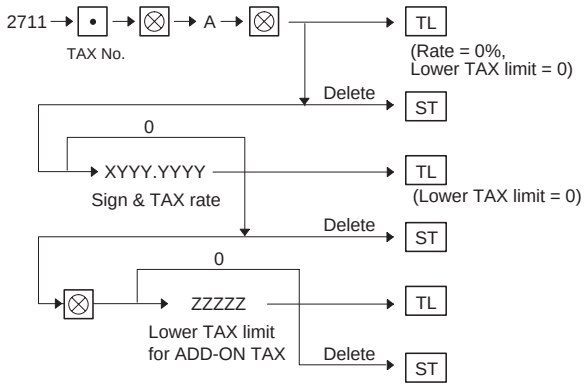
(Note: When the ER-03EF is connected, RS port 2 cannot be used for other purposes.)

∗DATA BACK UP FUNCTION always uses RS port 1.

(Note: If RS port 1 is not used by DATA BACKUP FUNCTION, it is available for other purposes by setup.)

[JOB#2711]

TAX RATE PROGRAMMING



A: TAX 1 PROGRAMMING = 1

TAX 2 PROGRAMMING = 2

TAX 3 PROGRAMMING = 3

TAX 4 PROGRAMMING = 4

X:	SIGN	X
	+	0
	-	1

YYY. YYY: RATE = 0.0000 to 100.0000 %

ZZZZZ: LOWER TAX LIMIT = 0 to 99999

(LOWER TAX LIMIT is invalid in VAT system.)

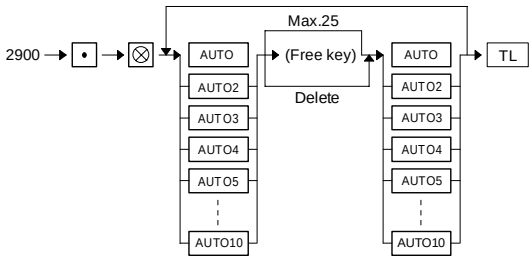
MRS = DELETE

[JOB#2900]

<CAUTION>

(This JOB must be performed at X2/Z2 mode position.)

AUTO KEY SETTING



(Auto key function)

- This machine has [AUTO] key which can be programmed by the following key-sequence.
- When [AUTO] key is depressed, the machine works the same as the programmed key-sequence programed.

<Example>

(X2/Z2)

2900 → • → ⊗ → AUTO → PLU1 → 100 → DEPT2 → AUTO → TL

(REG)

Key entry	R/J	Display	Comment
AUTO	PL000001 ∗1.10	PL0000001 1.10	same as PLU1 entry
		1	same as 1 entry
		10	same as 0 entry
		100	same as 0 entry
	DEPT02 ∗1.00	DEPT02 1.10	same as DEPT2 entry

(X2/Z2)

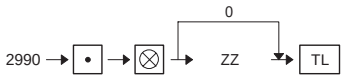
2900 → • → ⊗ → AUTO2 → 100 → TL → AUTO2 → TL

(REG)

Key entry	R/J	Display	Comment
DEPT 1	DEPT01 ∗1.00	DEPT01 1.00	
AUTO 2			
		1	same as 1 entry
		10	same as 0 entry
		100	same as 0 entry
	∗∗∗TOTAL ∗1.00	CHANGE 0.00	same as TL entry
	CASH ∗1.00		
	CHANGE ∗0.00		

[JOB#2990]

THERMAL PRINTER PROGRAMMING

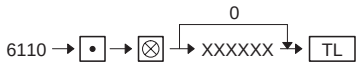


ZZ:	Selecting of light and shade	ZZ
	Lighter than standard	00
	Standard (90% for printer standard)	50
	Darker than standard	99

MRS = 50

[JOB#6110]

RS-232C TERMINAL No.

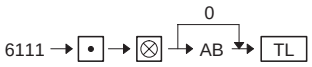


XXXXXX: Terminal number

MRS = 000001

[JOB#6111]

RS-232C TRANSMISSION



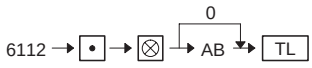
A:	Sending of CI signal	A
	No	0
	Yes	1

B:	Transmission line form	B
	Full duplex system	0
	Half duplex system	1

MRS = 00

[JOB#6112]

RS-232C FUNCTION SELECTING



A:	Print data	A
	Data download and upload	0
	Print data send	1

B:	RS-232C Baud rate	B
	4800bps	4
	9600bps	5
	19200bps	6
	38400bps	7

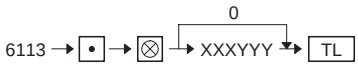
(∗) Data value “3/2/1/0” is reserved.

Note: The value of baud rate is used at Online communication and Print data function.
It is not used at Data back up function (SRV#996, SRV#998).

MRS = 06

[JOB#6113]

RS-232C PROGRAMMING



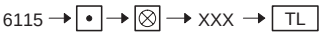
XXX: Start code (000-127)

YYY: End code (000-127)

MRS = 002013

[JOB#6115]

RS-232C TIME OUT

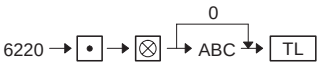


XXX: Time out time (1-255 sec)

MRS = 007

[JOB#6220]

PRINT DATA SENDING



A:	Sending of DR signal	A
	Yes	0
	No	1

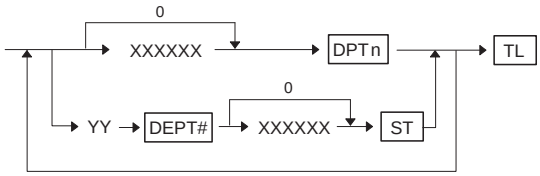
B:	Sending of CS signal	B
	Yes	0
	No	1

C:	Sending of all print data	C
	Disable	0
	Enable	1

MRS = 000

3. PROGRAMMING BY DIRECT KEY

1) DEPT UNIT PRICE
MODE: PGM1, PGM2



YY: Department Code (01-99)

XXXXXX: Unit price (Max. 6 digits)

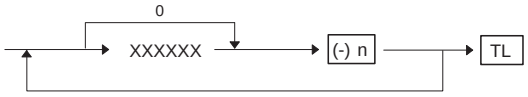
If a price is set for a department which amount entry type is “INHIBIT” or “OPEN”, its amount entry type is set as below automatically.

“PRESET” ← ”INHIBIT”

“OPEN & PRESET” ← ”OPEN”

MRS = 0

2) (-) PRESET AMOUNT
MODE: PGM, PGM2

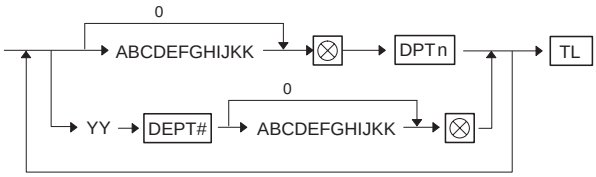


YY: Department Code (01-99)

XXXXXX: Unit price (Max. 6 digits)

MRS = 0

3) DEPT FUNCTION PROGRAMMING
MODE: PGM2



YY: Department code (01-99)

A:

Taxable 4	A
No	0
Yes	1

B:

Taxable 3	B
No	0
Yes	1

C:

Taxable 2	C
No	0
Yes	1

D:

Taxable 1	D
No	0
Yes	1

E:

ITEM VP	E
Non-compulsory	0
Compulsory	1

F:

REGISTRATION TYPE	F
NORMAL	0
SICS	1
SIF	2

G:

AMOUNT ENTRY TYPE	G
Inhibit	0
Open only	1
Preset only	2
Open & Preset	3

H: HALO Mantissa = 0 to 9

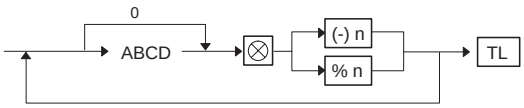
I: HALO Exponent = 0 to 8
H and I indicate A x 10^B
Except the value A and B, any amount over 99999999 can not be entered.

J: Commission group = 0 to 9

KK: Department group = 00 to 14
Group 01 to 09 : Plus department
Group 10 : Minus department
Group 11 : Plus HASH department
Group 12 : Minus HASH department
Group 13 : Plus BR department
Group 14 : Minus BR department

MRS = 000100118001
(TAXABLE 1, VP Non-compulsory, NORMAL, Open only, HALO = 17, Commission =0, Group =01)

4) (-) & % KEY FUNCTION PROGRAMMING MODE: PGM2



A:	SIGN	A
	+	0
	-	1

B:	ITEM / SBTL (-) / %	B
	ITEM (-) / %	0
	SBTL (-) / %	1

C: HALO Mantissa (for (-) key) = 0 to 9 (0 FIXED for [%n])

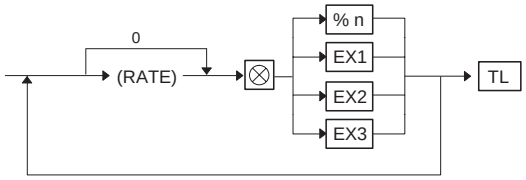
D: HALO Exponent (for (-) key) = 0 to 8 (0 FIXED for [%n])

H & I indicate C~10^D
Except the value C and D, any amount over 99999999 can not be entered.

HALO = 00: OPEN PRICE REGISTRATION INHIBIT (for [(-) n].

MRS = 1018 for [(-) n] (MINUS SIGN, SBTL (-), HALO =9999999)
1000 for [%n] (MINUS SIGN, SBTL%)

5) RATE PROGRAMMING FOR % AND EXCHANGE KEY MODE: PGM1, PGM2



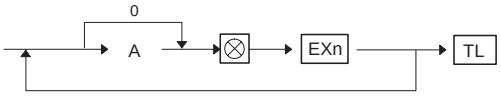
(RATE): XXX.XX: Rate for % (0.00-100.00)
XXX.XXXXXX: Rate for EXCHANGE (0.000000-999.999999)

The DECIMAL POINT must be entered for setting the decimal digits.

MRS = 0.00 (%n)
0.000000 (Exn) (n=1-3)

Note: This programming is invalid for [EX4] key.
Because [EX1], [EX2] and [EX3] are used only for PRESET RATE REGISTRATION but [EX4] is used only for OPEN RATE REGISTRATION.

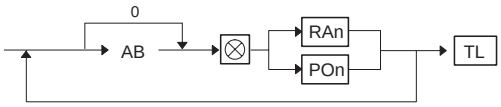
6) PROGRAMMING FOR EXCHANGE MODE: PGM2



A:	TAB	A
	0	0
	0.0	1
	0.00	2
	0.000	3

MRS = 2

7) PROGRAMMING FOR RA/PO KEY MODE: PGM2



A: HALO Mantissa = 0 to 9

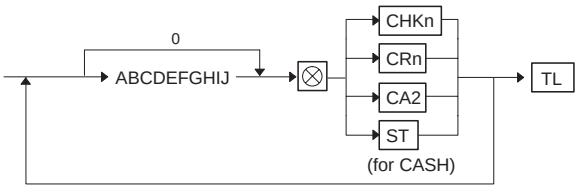
B: HALO Exponent = 0 to 9

H and I indicate A x 10^B
Except the value A and B, any amount over 999999999 can not be entered.

MRS = 19

8) PROGRAMMING FOR MEDIA KEYS & FUNCTION KEYS MODE: PGM2

([ST] key is used for programming of CASH.)



A:	EFT Function	A
	Non-compulsory	0
	Compulsory	1

(0 Fix for CASH & CASH2)

B:	SLIP PRINT	B
	Non-compulsory	0
	Compulsory	1

C:	Footer print on Recipt	C
	No	0
	Yes	1

D:	Non-add code entry	D
	Non-compulsory	0
	Compulsory	1

E:	Change due	E
	Enable	0
	Disable	1

F:	VP	F
	Non-compulsory	0
	Compulsory	1

G:	Drawer opening	G
	Yes	0
	No	1

H:	Entry of amount tendered	H
	non-compulsory (Cash, Check) inhibit (Credit)	0
	compulsory	1

I: HALO Mantissa = 0 to 9

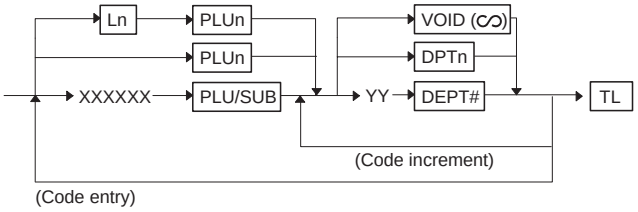
J: HALO Exponet = 0 to 8

I and J indicate $I \sim 10^J$

Except the value I and J, any amount over 99999999 can not be entered.

MRS = 0000000018 (CA, CHKn, CRn)

9) PROGRAMMING OF ASSOCIATED DEPARTMENT FOR PLU MODE: PGM1, PGM2



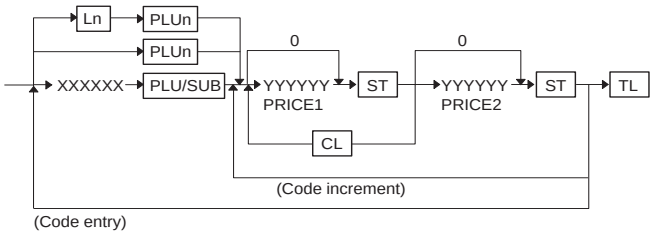
XXXXX: PLU CODE (1-999999)

YY: DEPT CODE (1-99)

When it is assigned some DEPT for the deleted PLU, the PLU is set the MRS value except its associated DEPT.

MRS = DEPT1 (PLU1-PLU20)

10) PLU UNIT PRICE MODE: PGM1, PGM2



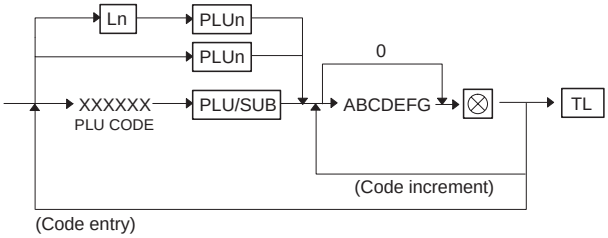
XXXXXX: PLU CODE (1-999999)

YYYYYY: UNIT PRICE (6 digits)

When it is assigned some DEPT for the deleted PLU, the PLU is set the MRS value except its price.

MRS = Price: 0, Price2: 0 (PLU1-PLU20)

11) PROGRAMMING OF FUNCTION FOR PLU MODE: PGM2



XXXXXX: PLU CODE (1-999999)

A:

Sign	A
+	0
-	1

B:

Taxable 4	B
No	0
Yes	1

C:

Taxable 3	C
No	0
Yes	1

D:

Taxable 2	D
No	0
Yes	1

E:

Taxable 1	E
No	0
Yes	1

F:

Amount entry type	F
Inhibit	0
Open only	1
Preset only	2
Open & Preset	3

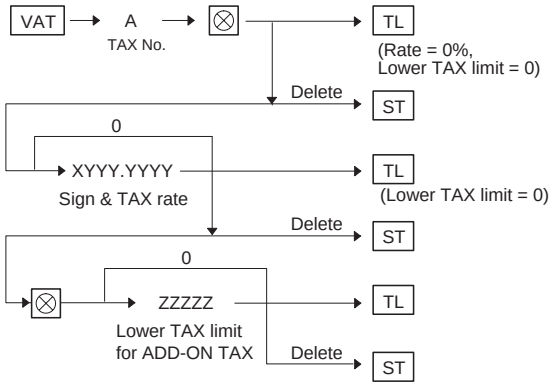
G: Commission group No. = 0-9

When it is assigned some DEPT for the deleted PLU, the PLU is set MRS value except its function.

MRS = 00001200 (PLU to PLU20)

(Sign +, Taxable 1, Preset only, Commmission: 0, Base quantity: 0)

12) TAX RATE PROGRAMMING
MODE: PGM2



A: TAX 1 PRIGRAMMING = 1
TAX 2 PRIGRAMMING = 2
TAX 3 PRIGRAMMING = 3
TAX 4 PRIGRAMMING = 4

X:

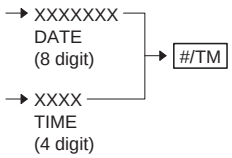
SIGN	X
+	0
-	1

YYY.YYY: RATE = 0.0000 to 100.0000 %
ZZZZZ: LOWER TAX LIMIT = 0 to 99999

(LOWER TAX LIMIT is invalid in VAT system.)

MRS = DELETE

13) DATE/TIME PRIGRAMMING
MODE: PGM2



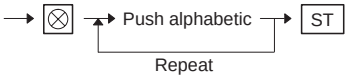
DATE) XXXXXXXX: YYYYMMDD or DDMMYYYY or MMDDYYYY
(YYYY: 2000-2099)
(MM: 01-12)
(DD: 01-31)
The date entry format complies with SRV#912_A.

TIME) HH: Hour (00 to 23)
MM: Minute (00 to 59)
The time entry does not complies with SRV#912_B.

MRS = 01/01/2000 (DDMMYYYY)
00:00

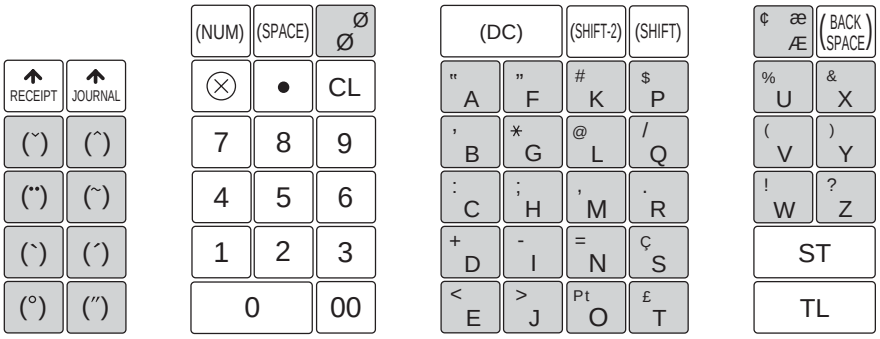
4. CHARACTER ASSIGNMENT METHOD

~ Using alphabetic assignment method ~

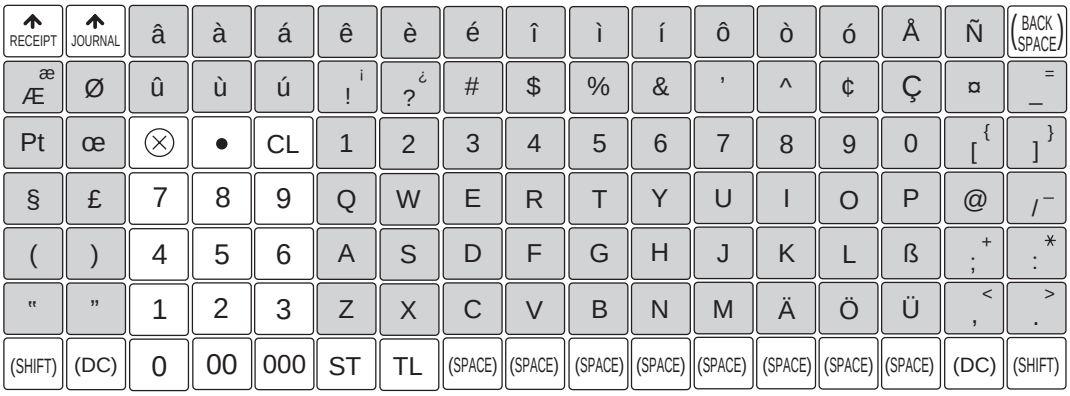


Programming key layout

ER-A410



ER-A420



Notes:

- The programming keyboard sheet is transparent, allowing placement over the standard keyboard sheet.
- The shaded area containts the character keys which are used for programming characters.

[(DC)] : Used to enter the double-size character.
[(SHIFT)] : Used to change a lower-case letter/upper-case letter.
[(SHIFT2)] : Used to select a symbol.
[(BACK SPACE)] : Used to back up the cursor for deleting.
[(SPACE)] : Used to enter a space.
[(Num)] : Used to enter a numeric character.

4 Using ten key of ECR

Note: [00] key is used to enter each 3 digit alpha code.

Examples

→ " A = A is set

" A [(Shift-2)] → " A = " is set

[(DC)] → " A = A (double character code) is set

[(Shift)] → " A = a (lowercase letter) is set

∗Once the [(Shift)] key is pressed, it stays down until it is pressed again.

<Character Code Table for text programming> Printer

CODE	CHARACTER
001	á
002	â
003	ê
004	î
005	ì
006	í
007	ô
008	ó
009	û
010	ú
011	œ
012	ű
013	ú
014	ő
015	ó
016	Λ
017	Ψ
018	Γ
019	..
020	Ω
021	Δ
022	Θ
023	Ξ
024	Π
025	Σ
026	Y
027	Φ
028	Ű
029	Ú
030	Ő
031	Ó
032	(Space)
033	!
034	"
035	#
036	$
037	%
038	&
039	'
040	(
041	)
042	*
043	+
044	,
045	−
046	.
047	/
048	0

CODE	CHARACTER
049	1
050	2
051	3
052	4
053	5
054	6
055	7
056	8
057	9
058	:
059	;
060	<
061	=
062	>
063	?
064	@
065	A
066	B
067	C
068	D
069	E
070	F
071	G
072	H
073	I
074	J
075	K
076	L
077	M
078	N
079	O
080	P
081	Q
082	R
083	S
084	T
085	U
086	V
087	W
088	X
089	Y
090	Z
091	Ä
092	Ö
093	Ü
094	^
095	_
096	`
097	a

CODE	CHARACTER
098	b
099	c
100	d
101	e
102	f
103	g
104	h
105	i
106	j
107	k
108	l
109	m
110	n
111	o
112	p
113	q
114	r
115	s
116	t
117	u
118	v
119	w
120	x
121	y
122	z
123	{
124	|
125	}
126	ß
127	ç
128	!!
129	^{1}
130	^{2}
131	^{3}
132	^{4}
133	$^1/_2$
134	^F_T
135	←
136	→
137	ↀ
138	ↀ
139	▶
140	◀
141	^{F}
142	^{T}
143	↓
144	ç
145	^{O}
146	¿

CODE	CHARACTER
147	ù
148	à
149	Æ
150	ϕ
151	Å
152	¤
153	é
154	è
155	Pt
156	¡
157	Ñ
158	:
159	£
160	¥
161	₀
162	⌜
163	⌟
164	`
165	.
166	$^{T}_{1}$
167	$^{T}_{2}$
168	$^{T}_{3}$
169	$^{T}_{4}$
170	$^{1}_{2}$
171	$^{1}_{3}$
172	$^{1}_{4}$
173	$^{2}_{3}$
174	Ê
175	ç
176	Ã
177	Á
178	í
179	
180	Ā
181	ā
182	Ē
183	ē
184	Ī
185	ī
186	Ū
187	ū
188	Ņ
189	ņ
190	Č
191	Š
192	ç
193	İ
194	Ġ
195	Ş

CODE	CHARACTER
196	Ģ
197	ģ
198	Ķ
199	ķ
200	Ļ
201	ļ
202	Ž
203	Đ
204	đ
205	Ć
206	ć
207	€
208	P
209	`
210	ě
211	š
212	č
213	ž
214	ý
215	ů
216	ň
217	ˇ
218	´
219	ř
220	◺
221	◸
222	▯
223	◸
224	*
225	§
226	Ø
227	^
228	↑
229	]
230	[
231	``
232	ä
233	ö
234	ü
235	æ
236	å
237	É
238	ñ
239	Õ
253	DC

Note: The character of this table is for reference.
Please see actual print out.

(DC): Double Code

: ECR Control Character (Not used for text)

<Character Code Table for text programming> Display

CODE	CHARACTER
001	á
002	â
003	ê
004	î
005	ì
006	(Space)
007	ô
008	ó
009	û
010	ú
011	(Space)
012	ű
013	ú
014	ő
015	ó
016	Λ
017	Ψ
018	Γ
019	(Space)
020	Ω
021	Δ
022	Θ
023	Ξ
024	Π
025	Σ
026	Y
027	Φ
028	Ű
029	Ú
030	Ő
031	Ó
032	(Space)
033	!
034	"
035	#
036	$
037	%
038	&
039	'
040	(
041	)
042	*
043	+
044	,
045	−
046	.
047	/
048	0

CODE	CHARACTER
049	1
050	2
051	3
052	4
053	5
054	6
055	7
056	8
057	9
058	:
059	;
060	<
061	=
062	>
063	?
064	@
065	A
066	B
067	C
068	D
069	E
070	F
071	G
072	H
073	I
074	J
075	K
076	L
077	M
078	N
079	O
080	P
081	Q
082	R
083	S
084	T
085	U
086	V
087	W
088	X
089	Y
090	Z
091	Ä
092	Ö
093	Ü
094	^
095	_
096	`
097	a

CODE	CHARACTER
098	b
099	c
100	d
101	e
102	f
103	g
104	h
105	i
106	j
107	k
108	l
109	m
110	n
111	o
112	p
113	q
114	r
115	s
116	t
117	u
118	v
119	w
120	x
121	y
122	z
123	{
124	|
125	}
126	ß
127	¢
128	!
129	1
130	2
131	3
132	4
133	(Space)
134	(Space)
135	←
136	→
137	(Space)
138	(Space)
139	▶
140	◀
141	F
142	T
143	(Space)
144	ç
145	O
146	¿

CODE	CHARACTER
147	ù
148	à
149	Æ
150	ϕ
151	Å
152	¤
153	é
154	è
155	Pt
156	(Space)
157	Ñ
158	:
159	£
160	¥
161	.
162	[
163	]
164	,
165	(Space)
166	(Space)
167	(Space)
168	(Space)
169	(Space)
170	(Space)
171	(Space)
172	(Space)
173	(Space)
174	Ê
175	ç
176	Ã
177	Á
178	ĭ
179	(Space)
180	Ā
181	ā
182	Ē
183	ē
184	Ī
185	ī
186	Ū
187	ū
188	Ņ
189	ņ
190	Č
191	Š
192	ç
193	İ
194	Ġ
195	Ş

CODE	CHARACTER
196	Ģ
197	ģ
198	Ķ
199	ķ
200	Ļ
201	ļ
202	Ž
203	Đ
204	đ
205	Ć
206	ć
207	€
208	P
209	`
210	ě
211	š
212	č
213	ž
214	ý
215	ů
216	ň
217	ˇ
218	(Space)
219	ř
220	(Space)
221	(Space)
222	(Space)
223	(Space)
224	*
225	§
226	Ø
227	^
228	(Space)
229	]
230	[
231	``
232	ä
233	ö
234	ü
235	æ
236	å
237	É
238	ñ
239	Õ
253	DC

Note: The character of this table is for reference.
Please see actual display.

(DC): Double Code

: ECR Control Character (Not used for text)

CHAPTER 3. OP X/Z, X1/Z1,X2/Z2 MODE

Roughly speaking, the following sales reports are available:

1) OP X/Z reports (individual clerk reports)
2) X1/Z1 reports (Daily sales total X and Z reports)
3) X2/Z2 reports (Periodic total X and Z reports)
4) Flash-read reports (Display sales amount)

In addition to the above the reports that are to be used for program checking are also available.

[Purpose]

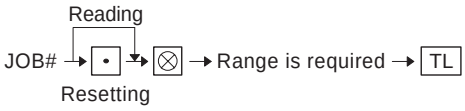
The above reports are each used to check sales data. The standard purpose of taking these reports are as follows:

OP X/Z reports: These reports are taken by operators in order to report their own sales data.

X1/Z1 reports: These reports are taken by the supervisor or manager in order to check and report daily sales totals at that point.

X2/Z2 reports: These reports are taken by the supervisor or manager in order to check and report periodic (weekly or monthly) totals.

Flash-read: These reports are taken by the owner or manager in order to check and display sales totals at that point.



[Operation]

In the table below those reports marked with a circle "O" can be executed.

PRINTING REPORT

REPORT NAME	JOB#	MODE ∗1						DATA FOR READING	
		OPX/Z		X1/Z1		X2/Z2			
		X	Z	X1	Z1	X2	Z2		
GENERAL	x00			O	O	O	O		∗1
DEPT (ALL GROUP)	x10			O		O			∗1
DEPT (INDIVIDUAL GROUP)	x12			O		O		GROUP No.	∗2
GROUP TOTAL	x13			O		O			∗1
PLU	x20			O	O	O	O	PLU CODE	∗3
PLU (DEPT)	x21			O	O	O	O	DEPT CODE	∗2
PLU STOCK	x24			O				PLU CODE	∗3
PLU ZERO SALES	x27			O		O			∗1
PLU PRICE CATEGORY	x29			O		O		PRICE	∗3
TRANSACTION	x30			O		O			∗1
TL-ID	x31			O		O			∗1
COMMISSION	x32			O		O			∗1
CLERK (ALL)	x40			O	O	O	O		∗1
CLERK (INDIVIDUAL)	x41	O	O						∗1, ∗5
CLERK (INDIVIDUAL)	x41			O	O	O	O	CLERK CODE	∗6
CASHIER (ALL)	x50			O	O	O	O		∗1, ∗7
CASHIER (INDIVIDUAL)	x51	O	O						∗1, ∗5, ∗7
CASHIER (INDIVIDUAL)	x51			O	O	O	O	CASHIER CODE	∗6, ∗7
HOURLY (ALL)	x60			O	O				∗1
HOURLY (RANGE)	x60			O				TIME	∗3
DAILY NET	x70					O	O		∗1
PBLU	x80			O	O			PBLU CODE	∗3
PBLU (CASHIER)	x81			O	O			CASHIER CODE	∗1
BALANCE	x82			O		O			∗1
STACK REPORT	x90			O	O	O	O		∗8

JOB# : 'x' is 1 for X1/Z1 mode, 2 for X2/Z2 mode, and 0 or nothing for OPX/Z mode.

FLASH READING REPORT

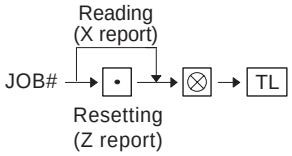
REPORT NAME	KEY ENTRY	MODE						DATA FOR READING	
		OPX/Z		X1/Z1		X2/Z2			
		X	Z	X1	Z1	X2	Z2		
DEPARTMENT	[DPTn]			○					∗9
DEPARTMENT	XX [DEPT#]			○				XX = DEPT CODE (2 digit)	∗9
CID	[X]			○					∗9
PAID TOTAL	[TL]			○					∗9

OTHERS OPERATION

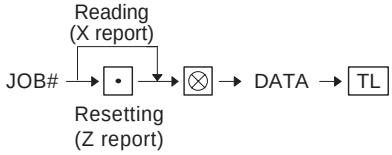
	JOB#	MODE						DATA FOR READING	
		OPX/Z		X1/Z1		X2/Z2			
		X	Z	X1	Z1	X2	Z2		
EURO CHARGE	800					○	○		∗10

∗1 MODE: X: Daily operator X report Z: Daily operator Z report
X1: Daily X report Z1: Daily Z report
X2: Periodic X report Z2: Periodic Z report
(X report) : The corresponding data is held in the ECR.
(Z report) : The corresponding data is cleared in the ECR.

∗2 To read respective reports, it is necessary to follow the procedure below.

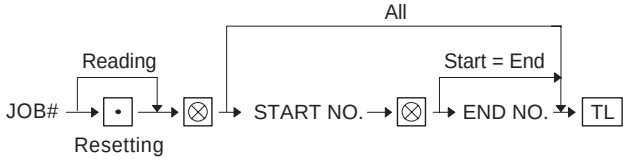


∗3 To read respective reports, it is necessary to follow the procedure below.



(DATA): GROUP No. (2 digit) (1-14)
DEPT CODE (2 digit)

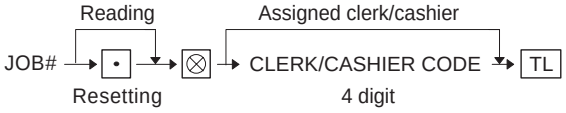
∗4 Report range can be specified by entering the start and end numbers according to the following procedure.



(START NO.) and (END NO.): PLU CODE (6 digit)
PRICE (6 digit)
TIME (4digit) (24-hour entry in spite of TIME SYSTEM)
PBLU CODE (4 digit)

∗5 Individual clerk/cashier report is issued about the assigned clerk/cashier.

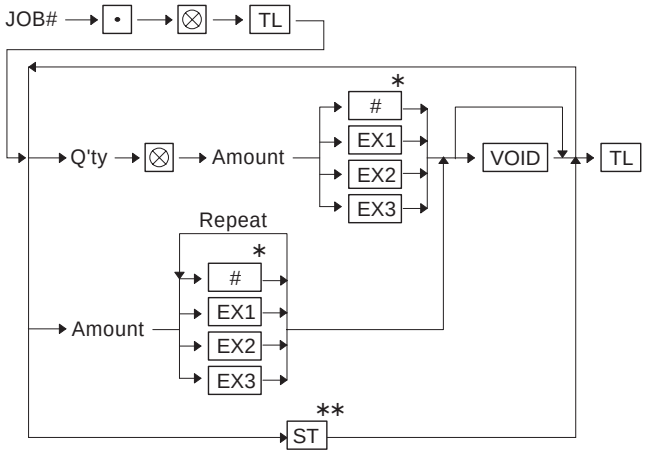
∗6 When clerk/cashier code is not entered, the individual clerk/cashier report is issued about the assigned clerk/cashier. And when clerk/cashier code is entered, the individual clerk/cashier report is issued about the clerk/cashier.



∗7 In case of CCD COMPULSORY for ALL CASHIER:
Until DAILY ALL CASHIER RESETTING is done, any other daily report that reports CID can not be executed.
The key sequence for DAILY ALL CASHIER RESETTING is special as the following.

In case of CCD COMPULSORY for INDIVIDUAL CASHIER:
Until all DAILY INDIVIDUAL CASHIER RESETTING are done, any other daily report that reports CID can not be executed.
The key sequence for DAILY INDIVIDUAL CASHIER RESETTING is special as the following.

<CCD ENTRY>

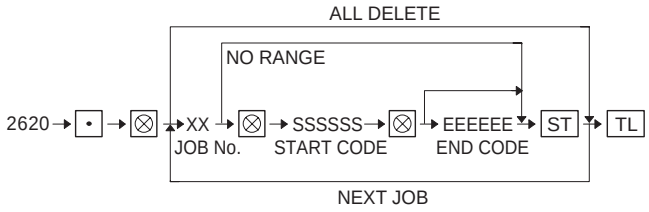


∗: [#] is used for CASH and CHECK amount entry.

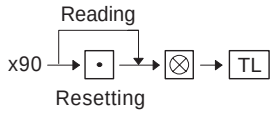
∗∗: The total CASH and CHECK amount entered by [#] can be displayed by [ST].

∗8 The stacked report function enables different reports to be printed successively with a single reporting operation.

The programming for the stacked reports can be accomplished by performing the following key operation in the PGM2 mode.



Stacked reports can be printed by performing the following key operation in the X1/Z1 and X2/Z2 modes.



If the job code of a report that cannot be involved in stacked reports is programmed, it is ignored (that report is not printed).

Also, if stacked reports include any other reports for which no Z reports can be taken, the Z reports of them are ignored and not printed.

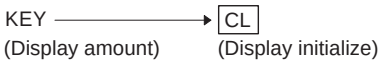
A maximum of 15 different reports can be printed successively with a single reporting operation.
Those 15 reports can include those reports that are identical in code number. In this case, however, if any data changes due to the printing of the previous report, the changed data is printed on the following report.

For example:

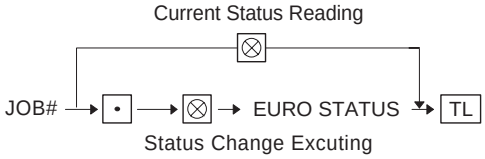
Consecutive number: The counter is incremented by one.

Z report: Data is reset to zero.

∗9 Reading display only.
The displayed amount can be cleared by [CL] key.



∗10 To read respective contents, it is necessary to follow the procedure below.



[Action]

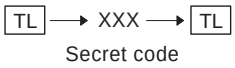
Individual counters for the following Z reports are incremented when those reports are printed.

1) General daily total report (Z1)
2) General periodic total report (Z2)
3) Hourly report (Z1)
4) Daily net total report (Z2)
5) PLU report (Z1/Z2)
6) Individual Cashier and All Cashier report (Z1/Z2)
7) Individual Clerk and All Clerk report (Z1/Z2)

[Additional function]

(1) Secret code entry
When printing reports in the X1/Z1 mode and X2/Z2 mode, a secret code must be entered prior to performing key operations to take reports.

The secret code can be entered following the procedure shown below.



(2) Overflow mark
If the amount or quantity in any totalizer other than GT to be printed on X or Z reports exceeds a programmed limit, the indication mark (overflow mark) is printed for the totalizer concerned.

COUNTER: Max. 5 (-99999~+99999)
Q'TY: Max. 7 (-9999999~+9999999)
AMOUNT: Max. 9 (-999999999~+999999999)

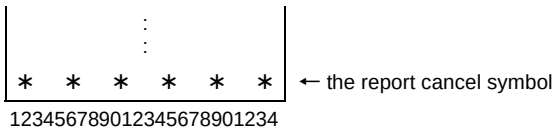
The overflow mark may be printed even if a totalizer does not reach the maximum amount. This occurs, for example, when the amount or quantity in the totalizer gets smaller than the maximum amount due to the entry of a negative amount after the overflowing of the totalizer. This means that when the totalizer overflows once, the overflow mark (for example, "!!") is printed.

(3) MODE TITLE
Each report is printed MODE TITLE at a header of report.
There are follows.

OPX report	#041 ∗OPX∗
OPZ report	#041 ∗OPZ∗
X1 report	#141 ∗X 1∗
Z1 report	#141 ∗Z 1∗
X2 report	#241 ∗X 2∗
Z2 report	#241 ∗Z 2∗

(4) Report cancel function
All report printing can be able to stopped.
It can be cancelled by turned the mode switch to MGR position while the data is printed. (In this case, the contents of memory are not cleared.)

<Print sample of Report cancel>



CHAPTER 4. CHANGING EURO FUNCTION (X2/Z2 mode JOB)

This job is own to be able to be changed easily from local currency system to EURO currency system in X2/Z2 mode.

(Reading the current EURO status)

<X2/Z2 mode>

800 → ⊗ → TL

(Changing EURO Function)

<X2/Z2 mode>

800 → • → ⊗ → X → TL

X: 1 = EURO STATUS (B)
2 = EURO STATUS (C)
3 = EURO STATUS (D)

[About EURO STATUS]

It is executing automatically to change from status (A) to status (B), (C), (D).

Selectable type is one of below 4 types.

And the selectable type is decided as below for each status.

CURRENT STATUS ↓	Selectable STATUS			
	(A)	(B)	(C)	(D)
(A)	—	O	O	O
(B)	—	—	O	O
(C)	—	—	—	O
(D)	—	—	—	—

Marked "O" is selectable

<Action>

It is executed some of below JOBs which is needed for each status.

1) Issue General Z1 report.
2) Issue General Z2 report.
3) Clear GT 1/2/3 and Training GT.
4) Convert the unit price of DEPT / PLU from LOCAL currency to EURO.
   If new unit price is over the max digits, its price is set as "0.00".
5) Convert the HALO amount and HALO digits from LOCAL currency to EURO. If new HALO amount is over the max digits, its price is set as "0.00".
6) Change PGM function "EX1 AMOUNT PRINTING FOR TOTAL AND CHANGE YES / NO".
7) Change PGM function "EX1 AMOUNT PRINTING FOR TOTAL VP YES / NO".
8) Change PGM function "EX1" CALCULATTION METHOD DIVISION / MULTIPLICATION".
9) Set "Domestic currency symbol" as EURO SYMBOL.
10) Set "Domestic TAB" as "2".
11) Set "EX1 currency symbol" as the suitable data.
12) Set "EX1 TAB" as the suitable data.
13) Set "Rounding SYSTEM (Denmark / Sweden / Normal)" as "Normal".
14) Set "Rounding up / down of the unit digits of AMOUNT" as "No".
15) Set "Lowest digit entering limitation of item" as "Arbitrary".
16) Set "Lowest digit entering limitation of payment" as "Arbitrary".
17) Set "Difference memory" as "No".
18) Set "Rounding of foreign currency for EX" as "Round off (4-DOWN, 5-UP)".(EURO Regulation)

Notes:

a) This JOB cannot set below additional EURO function automatically.
   Below items must be set by each PGM JOB after this job.
   (1) EX1 RATE
   (2) "CHECK, CREDIT operation for EX1 Yes / No"

b) When the unit price is converted, the rounding method of EURO currency is fixed as "Round off (4-DOWN, 5-UP)". [EURO Regulation]

<Selecting type and its action>

Current status (A) :

CURRENT STATUS (A)	Selected STATUS		
	(B)	(C)	(D)
1) General Z1 report	ISSUE	ISSUE	ISSUE
2) General Z2 report	ISSUE	ISSUE	ISSUE
3) GT1 / 2 / 3 & Training GT	—	CLEAR	CLEAR
4) Convert the unit price of DEPT / PLU	—	CONVERTING	CONVERTING
5) Convert the HALO amount and HALO digits	—	CONVERTING	CONVERTING
6) EX1 AMOUNT PRINTING FOR TOTAL AND CHANGE	“YES”	“YES”	“No”
7) EX1 AMOUNT PRINTING FOR TOTAL VP	“YES”	“YES”	“No”
8) EX1 CALCULATTION METHOD	“DIVISION”	“MULTI.”	“MULTI”
9) Domestic currency symbol	—	[EURO]	[EURO]
10) Domestic TAB	—	“2”	“2”
11) Ex1 currency symbol	[EURO]	The Current “Domestic currency symbol”	—
12) EX1 TAB	“2”	The Curernt “Domestic TAB”	—
13) Rounding SYSTEM (Denmark / Sweden / Normal)	—	“Normal”	“Normal”
14) Rounding up / down of the unit digits of AMOUNT	—	“No”	“No”
15) Lowest digit entering limitation of item	—	“Arbitrary”	“Arbitrary”
16) Lowest digit entering limitation of payment	—	“Arbitrary”	“Arbitrary”
17) Difference memory	—	“No”	“No”
18) Rounding of foreign currency for EX (This method is fixed by the software)	“ROUND OFF (4DOWN-5UP)”	“ROUND OFF (4DOWN-5UP)”	“ROUND OFF (4DOWN-5UP)”

Marked “—” is remaining the current data.

Current status (B) :

CURRENT STATUS (B)	Selected STATUS		
		(C)	(D)
1) General Z1 report		ISSUE	ISSUE
2) General Z2 report		ISSUE	ISSUE
3) GT1 / 2 / 3 & Training GT		CLEAR	CLEAR
4) Convert the unit price of DEPT / PLU		CONVERTING	CONVERTING
5) Convert the HALO amount and HALO digits		CONVERTING	CONVERTING
6) EX1 AMOUNT PRINTING FOR TOTAL AND CHANGE		"YES"	"No"
7) EX1 AMOUNT PRINTING FOR TOTAL VP		"YES"	"No"
8) EX1 CALCULATTION METHOD		"MULTI."	"MULTI"
9) Domestic currency symbol		[EURO]	[EURO]
10) Domestic TAB		"2"	"2"
11) Ex1 currency symbol		The Current "Domestic currency symbol"	[SPACE]
12) EX1 TAB		The Curernt "Domestic TAB"	—
13) Rounding SYSTEM (Denmark / Sweden / Normal)		"Normal"	"Normal"
14) Rounding up / down of the unit digits of AMOUNT		"No"	"No"
15) Lowest digit entering limitation of item		"Arbitrary"	"Arbitrary"
16) Lowest digit entering limitation of payment		"Arbitrary"	"Arbitrary"
17) Difference memory		"No"	"No"
18) Rounding of foreign currency for EX (This method is fixed by the software)		"ROUND OFF (4DOWN-5UP)"	"ROUND OFF (4DOWN-5UP)"

Marked “—” is remaining the current data.

Current status (C) :

CURRENT STATUS (C)	Selected STATUS		
			(D)
1) General Z1 report			ISSUE
2) General Z2 report			ISSUE
3) GT1 / 2 / 3 & Training GT			—
4) Convert the unit price of DEPT / PLU			—
5) Convert the HALO amount and HALO digits			—
6) EX1 AMOUNT PRINTING FOR TOTAL AND CHANGE			"No"
7) EX1 AMOUNT PRINTING FOR TOTAL VP			"No"
8) EX1 CALCULATTION METHOD			"MULTI"
9) Domestic currency symbol			[EURO]
10) Domestic TAB			"2"
11) Ex1 currency symbol			[SPACE]
12) EX1 TAB			----
13) Rounding SYSTEM (Denmark / Sweden / Normal)			—
14) Rounding up / down of the unit digits of AMOUNT			—
15) Lowest digit entering limitation of item			—
16) Lowest digit entering limitation of payment			—
17) Difference memory			—
18) Rounding of foreign currency for EX (This method is fixed by the software)			"ROUND OFF (4DOWN-5UP)"

Marked "—" is remaining the current data.

SHARP

COPYRIGHT © 2002 BY SHARP CORPORATION

All rights reserved.
Printed in Japan.
No part of this publication may be reproduced,
stored in a retrieval system, or transmitted.
In any form or by any means,
electronic, mechanical, photocopying, recording, or otherwise,
without prior written permission of the publisher.

SHARP CORPORATION
Digital Document Systems Group
Products Quality Assurance Department
Yamatokoriyama, Nara 639-1186, Japan
2002 May Printed in Japan ⓣ